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THE

MEDICAL JOURNAL OF AUSTRALIA

VOL. II.—11TH YEAR. SYDNEY: SATURDAY, SEPTEMBER 6, 1924. No. 10.

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THE MEDICAL JOURNAL OF AUSTRALIA

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SOME GYNÆCOLOGICAL IMPRESSIONS.[1]

By W. G. H. CUSCADEN, M.D. (Melbourne), F.R.C.S. (Edinburgh),
Melbourne.

BRIEFLY reviewing the work of the last eighteen months spent in post-graduate gynæcological work in London, Edinburgh and Vienna, I desire to bring under your notice some impressions of the work of these schools. Protest is everywhere made against indiscriminate curettage, probably because endometritis is now better understood. One time the changes of menstrual cycles were mistaken for inflammatory condition. Every patient in a gynæcological clinic was curetted, if nothing worse happened. Now it is only done on a definite indication. Myomectomy in some hands has given excellent results. Its greatest trouble has always been hæmorrhage. Now with Bonney's forceps to control hæmorrhage and an anterior incision better results can be obtained. In the treatment of uterine cancer Wertheim's operation holds the field. Scheide's para-vaginal hysterectomy is not often seen. Erlangen technique is not used in Vienna clinics. The operative mortality of Wertheim's operation was very high. Shock and sepsis accounted for most of the deaths. Greater care in the initial preparation is necessary. "Methyl violet" appears to be the ideal antiseptic. Rapidity of work and spinal anæsthesia have greatly reduced the shock. There is no objection to the use of the Trendelenburg position in five minutes after the injection. I have seen von Buccara in the polyclinic in Vienna and Bonney at the Chelsea Hospital do a complete Wertheim's hysterectomy in forty-five minutes. I saw Bonney do three in one afternoon. Much more care is taken over conservative out-patient treatment in Vienna than elsewhere. Here in the out-patient department we can see the thermic treatment of pelvic inflammation which reduces greatly the number of cases in which operation is required. I have seen Blair Bell's anterior hysterectomy for dysmenorrhœa, but am not impressed by it. My last ten years in the out-patients' department at the Women's Hospital have been embittered by the after results of similar ambitious operations. Simpler methods give equally good results.

In plastic work I most admired Darwall-Smith of St. George's, in London and Watson, of Edinburgh. The proper dissection of the pubocervical muscle and the repair of the hernia in it, that is a cystocele, gives very good results and explains past failures or indifferent results. Interposition is regarded with disfavour in England, but

[1] Read at a meeting of the Victorian Branch of the British Medical Association on July 2, 1924.

on the Continent many excellent after results are seen. Success depends upon the proper selection of patients and better technique. Perhaps it is a matter for the surgeon rather than the operation. As a test for permeability of the Fallopian tubes inflation with carbon dioxide is safe, efficient and almost painless. It is no longer justifiable to open an abdomen to find out whether or not a tube is patent. If the gas does not flow freely at a pressure below one hundred and twenty millimetres of mercury, the tube is not permeable. X-rays can be used after the production of a pneumo-peritoneum for the diagnosis of obscure conditions. Endometromata or adeno-myomata are attracting increasing interest. Many in the past were no doubt not recognized. Earlier diagnosis should give better results. In dyspareunia in a patient in the thirties palpable nodules in the posterior fornix should always suggest it. Like all who have had the opportunity for studying for any time at Edinburgh, I became greatly impressed with the teaching methods. A clinical discussion on a surgical subject by Stiles, Wilkie or Wade or on a gynæcological subject by Watson would start with a discussion of the anatomy of the part illustrated by dissections, blackboard drawing and sometimes lantern slides. Then the pathology was discussed and mounted specimens were passed round the class. The patients would then be wheeled in and examined by students who were called down in rotation. Finally the class would be told they would have an opportunity of seeing the patients operated on on a certain date. The point that impressed me so is the close correlation of anatomy, physiology and pathology to clinical surgery, a thing we lack in this school. I do not think that such a method could fail to give the students a sound attitude towards any surgical problem. Vienna by contrast is the school for the more advanced student. There in the big clinic you can see a perfect Wertheim hysterectomy done in forty-five minutes. There are only the surgeon, a first assistant, one sister and an anæsthetist. They have worked together for years, each one knows his exact work, the surgeon scarcely speaks. Everything is put into his hand before he asks for it. Classes in all subjects are conducted in English, the teaching is good, private tuition costs about sixteen shillings an hour, but of course class tuition is much cheaper. Clinical material seems inexhaustible. The museums of anatomy and pathology are tremendous.

LOCAL ANÆSTHESIA IN SURGERY.[1]

By LEO DOYLE, M.B., M.S. (Melbourne),
Surgeon to Out-Patients, Saint Vincent's Hospital, Melbourne.

IN the limited time at my disposal tonight I shall be unable to give you a useful idea of surgical conditions abroad and so I will confine myself to telling of the extent to which local anæsthesia is being used. For this purpose I shall divide the body into regions and shall discuss some of the operations and the type of local anæsthesia used in them.

In cerebral surgery there are differences in practice, but the man I saw doing the most of this work, Adson, of the Mayo Clinic, attempted to do all his cranial operations under local anæsthesia and in the great majority of cases succeeded well. The method used in inducing the anæsthesia was to inject 0.5% of "Novocain" solution under the aponeurosis in such a manner that the operative area was completely encircled. This process results in a complete anæsthesia of the encircled area. The reasons for doing this work under local anæsthesia are that it enables the patient to be placed in any convenient position and the venous congestion of the brain so characteristic of ether anæsthesia is not experienced. Another important reason is that by this means the surgical shock resulting from the cutting of a big bone flap is obviated. I saw Adson, using this anæsthesia, perform all manners of cerebral operations. Operations for cerebral gliomata, pituitary tumours, cerebral tumours, angle tumours and cord tumours were all successfully carried out. One of the prettiest operations I saw performed was the division of the posterior trigeminal root for neuralgia. Here the patient was placed in a semi-sitting posture and the first half of the operation, *id est* until the division of the middle meningeal artery, was done under local anæsthesia. Then ether was given and the remainder of the operation done under general anæsthesia. Adson does this operation exceedingly well and quickly, his time for one case that I saw being twenty five minutes up to the division of the nerve. His attack and technique are well thought out and well done and he has reduced an operation of extreme difficulty to one of more or less simplicity. Cushing, of Boston, uses ether anæsthesia for all his cerebral surgery, a Connell apparatus being used. His anæsthesia was excellent and in the course of a long operation there would be no trouble at all from this direction. I saw de Martel in Paris doing cranial surgery and he used a combination of local anæsthesia and ether given by the rectum. The patient was brought into the theatre under the influence of his ether injection, was then placed sitting upright at a special operating table and the "Novocain" solution was then injected around the area. The operation which was the cutting of a very large bone flap and under ordinary circumstances would have been attended with much shock, was finished with the patient in good condition. Wilfrid Trotter, of London, uses mainly chloroform and with Rood as anæsthetist gets very good anæsthesia.

In the surgery of exophthalmic goître I saw a lot of local anæsthesia and one of the best exponents of this was Crile, of Cleveland. He uses a combination of nitrous oxide and "Novocain," the gas being given only to the stage of analgesia. The patients are kept talking during the whole of the operation and it is part of the anæsthetist's duty to have a stock of topics of sufficient interest to hold

[1] Read at a meeting of the Victorian Branch of the British Medical Association on July 2, 1924.

the patient's attention. It does not matter what the topic is, provided it is not operations. The patients finish in excellent condition and are none the worse for what has happened to them. I saw de Quervain, of Berne, using local anæsthesia alone and Dunhill, of St. Bartholomew's, is still using a lot of local anæsthesia for his goître operations.

For operations in the chest for such conditions as bronchiectasis, phthisis and old empyema, local anæsthesia is much used, sometimes alone, but more often in combination with some form of light general anæsthesia. I saw Keller at Washington operating on old empyemata in patients who were exceedingly weak owing to long continued toxæmia and the like. He makes a speciality of many stage operations done under a combination of infiltration anæsthesia and nitrous oxide. Hedblom, at the Mayo Clinic, does the same. Denk, of von Eiselberg's clinic at Vienna, recommends local anæsthesia for these cases especially when operating for tuberculosis.

It is on the abdomen that the most varied use of local and general anæsthesia in seen. Some men attempt and often succeed in doing their whole operations under local anæsthesia and others make the local anæsthesia an adjuvant to the general, hoping thus to get greater relaxation of the abdominal wall and less shock. Some use simply regional anæsthesia of the abdominal wall and others combine this with Labat's splanchnic anæsthesia.

In the Hochenegg Clinic at Vienna I saw several gastro-enterostomies done under abdominal wall anæsthesia alone. I saw Lehman of the Kaiser Jubiläum Hospital remove a gall bladder from a stout female patient by injecting at their exist from the spine the dorsal roots from the sixth dorsal to the first lumbar nerves and then filling the splanchnic nerve area with "Novocain" solution. The anæsthesia was perfect and the patient evinced no sign of any pain during the whole operation. Haberer, of Innsbruck, and Finsterer, of Vienna, both use regional anæsthesia of the abdominal wall combined with infiltration of the mesentery in doing gastrectomy and both use ether in small doses in those patients in whom much pulling on the stomach is necessary. At the Mayo Clinic many men use abdominal wall block to get abdominal muscle relaxation and less shock. Crile working along anoci-association lines infiltrates all tissues that are to be divided and combines this with nitrous oxide as well.

It is, however, in the lower part of the abdomen that the most successful use of local anæsthesia is seen. For prostatectomy there are several different methods all of which I saw done successfully. Parasacral anæsthesia has for its basis the blocking of the sacral nerves as they emerge from their respective foramina by means of needles passed through the foramina posteriorly or by means of long needles passed close up to the anterior sacral surface from below. Parasacral anæsthesia alone is used by Lowsley, of New York, to do his perineal prostatectomies and parasacral *plus* abdominal wall anæsthesia by the Mayos for the supra-pubic operation. Legueu, of Paris, uses an infiltration of the abdominal wall and when the bladder has been opened, he uses infiltration around the prostate, for which process special needles are necessary. Thomson Walker uses a weak spinal anæsthesia together with a weak general anæsthetic. All these methods give excellent results and the choice of method to be used depends on the preference of the operator.

Perineal operations for rectal carcinoma can also be done under parasacral anæsthesia, but they may require the addition of some general anæsthetic when the peritoneum is to be opened. Miles, of London, does his celebrated abdomino-perineal operation under a combination of spinal analgesia and nitrous oxide. The anæsthesia and relaxation are excellent and the condition of the patient afterwards is suprisingly good when the severity of the operation is considered. Hæmorrhoids also provide a beautiful operation for local anæsthesia as the injection paralyses the sphincter and does away with the necessity for dilatation and its consequent pain. They can be removed either with local infiltration or with caudal anæsthesia.

At the Wertheim Clinic in Vienna all the gynæcological laparotomies including the radical hysterectomy for *carcinoma uteri* are done under special analgesia with "Tropacocaine." They claim that they have no difficulty and no trouble, but I must say I saw one death due to faulty technique in administering the drug. I also saw many vaginal operations including the interposition operation done under parasacral anæsthesia, with no pain to the patient.

In case I may be thought to have over-stated the case for local anæsthesia, it should be known that its successful use in major surgery is not for the tiro. The successful infiltration of a large area or the blocking of a nerve requires practice and a lot of practice. Again, the surgeon who would operate under local anæsthesia, must remember that he has to bear the strain of operating on a conscious patient and this fact in itself takes as much out of the surgeon as the actual performances of the operation. But on the other hand the person in the operating room who requires the most consideration is the patient and if it is thought that it is in the patient's best interests to be operated on under local anæsthesia, then the surgeon should be ready, willing and able to use it.

NOTES ON OBSTETRICS ABROAD.[1]

By H. S. JACOBS, M.B., B.S. (Melbourne), F.R.C.S. (Edin.), Dip. G.O. (Dublin),
Honorary Clinical Assistant, The Women's Hospital, Melbourne.

WHEN I reached Dublin in October, 1921, it was in a state of great unrest. Peace negotiations between England and Southern Ireland had just opened.

[1] Read at a meeting of the Victorian Branch of the British Medical Association on July 2, 1924.

I entered the Rotunda Hospital as a resident postgraduate and remained there six months. I came away from that famous old hospital with a very different impression from when I first entered.

The Rotunda bases its extraordinary and magnificently efficient results in obstetrics on the fact that there a particular method of treatment has been evolved only after all others have been fairly tested. In many respects they are dogmatic, but figures speak and support their claims. Thus the basis of successfully conducting a case of labour is the simplicity of the technique and the fact of utmost importance that the same technique may equally well be adopted in both interne and externe practice. They do this and they ask no more of others—their results justify that claim.

To this end the Master of the Rotunda presents his clinical report for the year which gives in detail full accounts of all complications, new methods of treatment and so on and also a full account of each individual fatal case. This report is presented annually at a meeting of the Obstetric Section of the Royal Academy of Medicine and is vigorously criticized—adversely or otherwise—by all interested. But this makes a friendly rivalry possible between the Coombe Hospital and the Rotunda Hospital and leads to a still better efficiency.

To me, the most striking work there was their treatment of eclampsia and the toxæmias of pregnancy. There are only two clinics in the world publishing statistics of a maternal mortality around 5%, namely Stroganoff's and the Rotunda.

I understand, however, that in Sydney they are obtaining equally good results now. I believe the Rotunda has now even a better percentage mortality as they had not a single death from this condition during the twelve months I was in Dublin. Without going into full details of the treatment, two important points deserve explaining: (i.) No morphine is given unless for extreme restlessness due to labour pains, when 0.015 gramme (a quarter grain) is given and is not repeated. It is not used to control fits. (ii.) Rightly or wrongly eclampsia is believed to result from an intestinal auto-intoxication. Colon lavage is the treatment carried out to meet this. On the successful and complete performance of this measure depends the ultimate result. You will observe that the condition of pregnancy or of labour is not considered.

The technique of efficient colon lavage is not so simple as may be imagined and I would recommend those interested to read the description in Fitzgibbon's "Practical Midwifery." Many are surprised to know that from forty-five to seventy-two litres (ten to sixteen gallons) of fluid are required and that it takes about forty-five minutes to do it thoroughly. I think it worth while to describe one source of error.

After the contents of the rectum are washed out and the tube successfully passed over the constriction between the second and first parts of the rectum into the pelvic colon, the fluid returns clear for many minutes and it is here that the procedure is often discontinued. By further introducing the tube until about thirty-five to forty-five centimetres (fourteen to eighteen inches) have entered and by further irrigation, more faecal matter is washed out and this is the all-improtant part, being the contents of the transverse colon.

Another interesting point is that the toxæmic symptoms and fits are often accentuated during this lavage and this may be due perhaps to a stirring up of the toxins concerned and their further absorption.

There are many other interesting points of detail, but I have not the time now to describe them.

There occurs during the second, third or fourth day according to the gravity of the case and the success of the treatment a remarkable polyuria which may not reach its maximum until the second or third week. This has been carefully observed and described by Fitzgibbon and has an important bearing on the prognosis.

Dr. Fitzgibbon is a very fine practical obstetrician and his treatment of contracted pelvis, recently published in *The British Medical Journal*, gives excellent results. I was particularly impressed by his definition of the trial of labour and his practical application of it. It concerns the position of the fœtal head and the state of cervix and size of the *os* after a certain period of labour has elapsed. As a natural sequence I am glad to say Cæsarean section is not of frequent occurrence, for only fifteen were carried out in 1920-1921, thirteen of these being for contracted pelves and of the thirteen patients six had previously been delivered by section. When we consider Dublin's social conditions, the amount of poverty, rickets and so forth, these figures are excellent. During the same period at the Women's Hospital, Melbourne, there were twenty-one Cæsarean sections.

Pubiotomy is being revived with remarkably successful results. It is not to be regarded as an operation of selection, but of election after a trial of labour. Another noteworthy feature was the infrequency of puerperal sepsis and the low morbidity in general among the patients so affected.

Gordon Luker, of the London Hospital, has adopted a new treatment for puerperal septicæmia which is described in the *Proceedings of the Royal Society of Medicine*, December, 1923. It consists of subcutaneous injections of anti-streptococcal serum in doses of thirty cubic centimetres for the first two days, twenty cubic centimetres on the third day and then quinine bi-hydrochloride 0.3 gramme (five grains) intra-muscularly each day. If increased effect is required, it is given intravenously in 0.18 gramme doses.

In connexion with the treatment of *placenta prævia*, Fitzgibbon is most dogmatic against Cæsarean section as the treatment of election. He grudgingly admits one exception, that of a *primipara* near the menopause who is voluntarily prepared to take the increased risk and she should have passed the thirty-fourth week of pregnancy. Both in interne and externe practice podalic version is the treatment performed, either internal or combined. In eleven consecutive years there were one hundred cases of *placenta prævia*, only three being in *primiparæ*. This then is an uncommon

complication in *primiparæ* and this fact further strengthens the argument against Cæsarean section. Fitzgibbon states: "It is the condition of the *os* which governs the treatment in *placenta prævia*." The following figures speak for themselves: In 1919 to 1920 there were twelve cases and one maternal death; in 1920 to 1921 there were fourteen cases and no maternal deaths. Much more remarkable are the externe figures, where women are treated in their own homes under shockingly insanitary conditions. For two years ending 1921 there were twenty-one patients so treated, with only one maternal death, making a total for two years of hospital practice with forty-seven cases and two deaths.

Yet another feature in comparison to our own conditions here was the small number of abortions and the noticeable absence of septic states. These are a reflection of economic and social conditions and can only be read in one light.

Without wishing to criticize, it is interesting to compare the figures of the Rotunda and the Women's Hospital, Melbourne. Each has a very similar number of deliveries annually, there being a slightly larger number at the Women's Hospital, Melbourne.

The figures in the accompanying table are in respect to eclampsia, *placenta prævia*, Cæsarean section and abortion.

Condition.	Rotunda.			Women's Hospital, Melbourne.		
	Year.	Cases.	Deaths	Year.	Cases.	Deaths
Eclampsia ..	20-21	16	1	20-21 21-22 22-23	36 35 20	11 10 2
Placenta prævia ..	19-21	26[1]	1	19-20 20-21 21-22 22-23	17 21 22 21	1 2 1 3
Cæsarean sections ..	20-21	15		20-21 21-22 22-23	21 31 58	
Abortions ..	20-21	244[2]		20-21 21-22 22-23	653 725 870	

[1] If the externe cases are included the number is forty-seven cases and two deaths.
[2] This number is made up of fifty interne and one hundred and ninety-four externe cases.

Also I was struck by the very few cases of pyelitis complicating pregnancy.

A condition about which I was particularly interested was vesicular or hydatidiform mole. First explained by Virchow as a myxomatous degeneration of the chorionic villi and later as an œdematous degeneration, it is now regarded as not only a degeneration, but also as a form of new growth. Its incidence appears to be increasing in latter years.

In ten years at the Rotunda, ended 1920, there were nine cases among 19,995 admissions to the obstetric department and yet there were five cases alone in the next twelve months among 2,150 admissions.

At another meeting of the Academy, there was presented a new pelvimeter designed by Dr. R. E. Tottenham. It is chiefly used for internal, but may also be used for external pelvimetry. I note it has been described in *The British Medical Journal* of February 23, 1924. It is very ingenious and by its adaptability and rigidity gives very accurate measurements.

During my six months' work at Trinity College, Oscar Frankl, of Vienna, came over by invitation and gave a six weeks' post-graduate course which was extremely interesting and beneficial. He may be described as a clinical gynæcological pathologist and he lays great stress on pathology in gynæcology which in the past has been too little regarded. Gynæcological pathology has undergone many changes in the last ten years and since Hitschmann and Adler first described the periodical changes in the endometrium, endometritis is now a word and a diagnosis not to be lightly and indiscriminately used. Hæmorrhage is not necessarily a sign of endometritis.

The Dublin School invites over annually prominent foreign gynæcologists and, of course, derives great benefit. Since Frankl, Schiller and also Zweifel, of Munich, have been there.

Before leaving obstetrics, I should like to mention the technique for the induction of labour by castor oil, quinine and "Pituitrin" as evolved by Professor B. P. Watson. This is being carried out at the Royal Simpson Maternity Hospital, Edinburgh, and in Professor Watson's hands is successful in 91% of patients at or over term, and 75% of those premature (four to one weeks). It is of great advantage in that no instrumental manipulations are required and so the risk of infection does not exist. The average time to the onset of labour is twenty-nine hours which compares favourably with instrumental measures. Professor Watson along with most other authorities is emphatic about the dangers and abuses of local treatment in cases of puerperal sepsis. Many authorities condemn it absolutely, while others give few exceptions when it may be performed and then only if rigid aseptic precautions and conditions are available. If these do not exist, it is better omitted.

After a year in Dublin I spent some time in London, mostly at the Chelsea Hospital for Women. There I was most interested in the Wertheim operation as performed by Victor Bonney. The outstanding features of his technique were: (i.) Spinal anæsthesia ("Tropacocaine") *plus* light ether anæsthesia; (ii.) rapidity of removal of the affected area and the completeness; (iii.) closure without drainage; (iv.) his new antiseptic—"Violet green." This he uses for both abdominal and vaginal preparations and it is composed of 0.5% crystal violet and 0.5% brilliant green in equal volumes of rectified spirits and water. (v.) Packing of vagina left *in situ* until special clamp is applied. I saw Bonney do hysterectomy three times by the Wertheim method between 2 p.m. and 5 p.m., one early case of carcinoma of the cervix, taking exactly twenty-six minutes.

I endeavoured to estimate the prevalence of opinion in regard to radium therapy in connexion with carcinoma of the uterus. The methods in vogue are: (i) Operation alone; (ii.) radium alone. Zweifel stated that out of twenty-one clinics in Germany only six now use this method; (iii.) radium followed not later than ten days by operation and then again radium or X-rays. Frankl states he had some success with this method; (iv.) radium in inoperable cases later becoming operable; (v.) operation followed by radium and X-rays. This appeared to be the usual line of procedure.

In Edinburgh the initial dose was from 2,400 to 3,000 milligramme hours, which seemed larger than I had previously noted. Radium is now used successfully in those cases of "chronic metritis" and is advocated by Sidney Forsdike, of the Soho Hospital for Women, London.

Among many distinguished men at the London Hospital I met Eardley Holland who has done a great deal of work in the pathology of ante- and post-natal death of the fœtus in association with the intra-cranial hæmorrhages of the newly born.

Later in Edinburgh I worked with Professor B. P. Watson, late of Toronto, for about nine months and also saw the work of Young, Haig Ferguson and others. Professor Watson's work appealed very greatly to me, especially so his general surgical technique and his enthusiasm and knowledge of gynæcological pathology. A douche is never used there in the operating theatre, even for vaginal work and he used ordinary 5% tincture of iodine for preparing both perineum and vagina. He also rarely uses chromacized catgut, but always uses double catgut, thereby never losing the gut from the needle.

In his teaching clinic new patients and ward patients prior to operation are brought into the examination room on a trolley through a door situated behind a curtain. The trolley is protruded from under the curtain, the patient sees nobody in the clinic and often is quite unaware of how many individual examinations may be made.

Haig Ferguson has introduced a new method of suspending the uterus. It is a modification of the Alexander-Adams operation, combined with intra-peritoneal manipulations through a Kustner's incision.

Whilst in Edinburgh, I attended the British Congress of Obstetrics and Gynæcology, 1923. The leading subject was dysmenorrhœa and Blair Bell opened by reading a masterly paper. Dysmenorrhœa is now referred to as intrinsic or extrinsic in place of spasmodic and congestive and various other forms of description. He described what he now terms the cochleate uterus, that is one we call acutely antiflexed with a reversion to the pubescent type. In reality, in this type, the actual cavity measures from 1.25 to 2.54 centimetres (half to one inch) longer than the normal. Among other interesting work was mentioned the perforating hæmorrhagic cysts of the ovary of Sampson, with an alternative name of endometrioma.

In Edinburgh, under the enthusiasm and the greatness of Sir Harold Stiles, the surgical teaching is magnificent and again great importance is attached to surgical pathology. New work on hydrocephalus done by Dandy, of Baltimore, has been confirmed and elaborated by John Fraser, of Edinburgh, and the types of hydrocephalus described in text-books as internal and external are now described respectively as ventricular or obstructive and extra-ventricular or communicating, the pathology of the condition having been now definitely established.

In so far as endocrinology applies to obstetrics and gynæcology, Blair Bell's work occupies first place both in England and in America and he is really the only one of note still practising on any scale glandular therapy.

In cases of intrinsic dysmenorrhœa in association with the cochleate uterus he uses thyreoid extract with a fair measure of success, his other "cure" being anterior hysterotomy. Other men, notably Victor Bonney and, if I remember correctly, Gray Ward in New York, no longer use glandular therapy. Frankl, of Vienna, has done an enormous amount of work in this direction and divides the actions of the glandular hormones into two classes which for convenience I have called complementary, for example ovarian and thyreoid and pituitary and antagonistic (thymus and pineal). During the war in Austria owing to the deficiency in proteins and fats there arose a condition known as war amenorrhœa. This could be cured in either of two ways: (i.) By the use of pituitary extract, anterior and posterior lobes (by this method success was obtained in 60%); (ii.) by fractional doses of X-rays, causing stimulation to the ovaries.

Whilst in New York, I visited the Women's Hospital of New York, Mount Sinai Hospital, Lenox Hill Hospital, Saint Vincent's Hospital and the Rockefeller Institute for Medical Research. At the latter institution much work was being done in the typing of pneumococci and preparation of the corresponding sera and also in the treatment of pneumonia in a most elaborate oxygen chamber. At the Women's Hospital Dr. George Gray Ward who is Surgeon-in-Chief, kindly placed all facilities at my disposal and personally conducted me over, explaining the very interesting administration. Dr. Gray Ward is the great advocate for standard methods of administration and at the request of the American College of Surgeons has devised an excellent system. The record system of the Women's Hospital is simple, perfect and a model of efficiency. He rightly says that a hospital record should be on the same plane of efficiency as that of a large business organization. In the new operating theatre had recently been placed a beautiful memorial tablet to James Marion Sims.

As my time has nearly elapsed, although much more of interest could be told of the New York hospitals, I would like to bring to your notice the method of Rubin, described as trans-uterine peritoneal inflation of the Fallopian tubes, to determine their patency in cases of sterility. To my mind this is one of the greatest and most valuable advances in modern gynæcology. I worked with Rubin for three days both at his hospital and private

clinics and was most impressed with the very great value of the procedure.

Formerly a young married woman would enter the consulting room complaining of sterility and on examination the tubes were not palpable, nothing abnormal detected anywhere or perhaps a slight degree of ante-flexion or a small external *os*. On the assumption that the tubes were patent, various procedures were performed according to the zeal of the operator—dilatation, curettage, intubation and mutilating operations such as Pozzi's or Dudley's. The method of Rubin now shows how often the tubes were not patent and how often these useless cervical operations have been performed in the dark. Rubin's method is without danger, free from complications and can easily be carried out in the surgery by one who has acquired the technique in a few minutes with little or no pain or discomfort to the patient. There are no fallacies or errors and it is found more often than before-times that the male is at fault, the tubes proving to be patent. As soon as I have collected a sufficient number of personal cases of insufflation, I should like to present to you a paper on the apparatus, technique, indications, contra-indications and results of the Rubin method in its relation to diagnosis of patency of the Fallopian tubes in association with sterility in the female.

THE TREATMENT OF VENEREAL DISEASE IN OTHER COUNTRIES.[1]

By D. Rosenberg, M.B., B.S. (Melbourne),
Melbourne.

In a short paper dealing with venereal disease I thought that it would be better to give you some of the practical points gathered on a trip through America from San Francisco to Chicago, the Mayo Clinic in Minnesota, to Boston, New York and the Johns Hopkins Hospital, at Baltimore, to London, Paris, Prague, Berlin, Vienna and Rome. Rather than give you a series of great names, it is better for me to gather into a small compass some of the ideas garnered there.

Briefly stated, we are no nearer a "cure" for venereal disease. Dependence must be placed on perfection of older methods and due regard must be paid to better diagnosis and treatment just as in other diseases and other specialities.

Gonorrhœa.

The personalities in the world of venereal diseases are divided into two camps as far as gonorrhœa is concerned, one containing those who irrigate and the other those who do not. The former camp is divided into those who irrigate into the bladder as soon as possible and those who strenuously object to any gonococci being washed into the bladder.

We see at Saint Thomas's Colonel Harrison, the foremost specialist in venereal diseases in the British Empire, irrigating into the bladder at the outset, while the foremost Americans say that is wrong. Glingar, of Vienna, states that he has been able to demonstrate gonococci from the mucous membrane of the bladder in acute cases, so that it would seem in theory that Harrison's method is the incorrect one. Notwithstanding theory, Harrison's figures for prostatitis and epididymitis complicating acute gonorrhœal urethritis are far better than those of anyone else who irrigates. May I suggest the reason is that in no case does he allow his irrigator to flow from a height greater than about a metre from the urethra, thus obviating to the fullest those anti-peristaltic waves that disturb the musculature of the prostate when greater heights are used. If he cannot irrigate into the bladder at this height, he does not increase the pressure. I was able in Prague to see a *post mortem* examination on a man who had been irrigated with a one in five hundred solution of potassium permanganate at a height of 1.65 metres (five feet) one hour previously. Microscopic examination of his anterior urethra showed splitting of the inflamed friable mucous membrane in many places.

I would here put in a plea for less strenuous irrigation and less chemical irritation of the urethra.

All manner of substances are used for irrigation. Potassium permanganate is still the favourite. Silver nitrate with its American relatives "Silvol," "Neo-silvol" and "Argyrol" as well as its German relatives, "Protargol" and "Collargol" have still some advocates, but the great potassium permanganate seems to be the last and best refuge. Every now and then some new drug, such as the dye "Acriflavine" which is British, attracts notice. Greenberger in New York shouts its praises loudly and shows great results. The claim for every new drug is made on the assumption that it has high penetrative powers. Especially is this so with the new chlorine group.

As we all know, the gonococci do not lie on the surface alone, but even in the early stages penetrate into the sub-mucous layer. It is difficult to see how any drug can penetrate into that vascular area and it is absurd to quote figures showing how a solution of given strength kills gonococci in a certain time, because the whole idea of irrigation is to remove the pus lying on the surface. The gonococci that have been swept into the waste bucket are the only bacteria that have sufficient time to be killed by the irrigating solution.

Irrigation acts apparently by the mechanical removal of discharge *plus* the hyperæmia consequent on the application of heat to the inflamed tissues and it does not matter whether saline solution or any other substance is used.

J. E. R. McDonagh, prince of iconoclasts in the realm of venereal disease, scoffs loudly at those who irrigate. It is quite a shock to pass from Harrison's clinic at St. Thomas's to the McDonagh clinic at the London Lock Hospital.

Harrison's clinic is an enormous room with about twenty cubicles where patients irrigate themselves and where injections for syphilis are given. McDonagh gives nothing but intra-muscular injections of manganese butyrate, "Contramine" (a sulphur preparation) and detoxicated vaccine. He

[1] Read at a meeting of the Victorian Branch of the British Medical Association on July 2, 1924.

thinks that irrigations are obsolete and productive of chronicity. I was with him for six weeks and his results certainly bear out his claims. I saw patients that had been the rounds of the hospitals in London, having been treated with irrigations, diathermy and so on, completely lose their yellow discharge with a few injections of the above-named drugs. For those who not irrigate, I append his method of treatment.

First day of visit: Manganese butyrate one cubic centimetre of 1% solution is injected. Fifth day of visit: Manganese butyrate 1.5 cubic centimetres of a 1% solution is injected. If improvement is not good after the second injection he gives one cubic centimetre of "Contramine" and then one cubic centimetre of manganese butyrate. In persistent urethritis he gives colloid mercury one cubic centimetre of a one in two thousand suspension. In acute salpingitis on the first day he gives one cubic centimetre of manganese butyrate. On the fifth day he gives 1.5 cubic centimetres of the same drug and on the eighth day he gives two cubic centimetres. Then he gives a course of vaccines: four injections of two thousand five hundred millions and four injections of five thousand millions of detoxicated gonococcal vaccine at five to seven day intervals. He gives another course in four to five months if examination then reveals the presence of gonococci. He uses "Contramine" in gonorrhœal rheumatism. On the first day he gives 0.125 gramme; on the fourth day he gives 0.25 gramme; and on the ninth day he gives 0.5 gramme. I have seen the happiest results on this treatment without irrigation.

Acute gonorrhœa was being treated in London with diathermy. The tissues are heated locally to about 40° C. at which temperature the gonococcus cannot live. In the same category come the subcutaneous and intramuscular injections of protein such as typhoid vaccine and milk. The temperature of the patient rises to about 40° C. (104° F.) and thus the ground is rendered less suitable for the gonococcus, four to five or even ten cubic centimetres of milk are injected intragluteally at weekly intervals. I saw this method being exploited in Prague and Carlsbad in Czecho-Slovakia and the operators claimed great success with it.

There does not appear to be much sense in irrigating the anterior portion of the urethra only when the posterior portion is affected.

In acute gonorrhœa it is well that those who irrigate, should keep a watchful eye on the involvement of the posterior portion of the urethra by asking the patient to come with a full bladder at every visit and after irrigating to get him to micturate into a glass measure. Pus or a microscopeal examination of the clear urine will show if the posterior portion of the urethra is involved. So too in the diagnosis of the position of the gonococci in late subacute or chronic gonorrhœa. The patient is told to come with a full bladder. The anterior portion of the urethra is irrigated with salive solution or boracic solution till clear. The urine is voided and examined for pus or gonococci. The bladder is then irrigated till the washing is clear. The prostate is massaged and the drop caught on a slide and examined. Thus it is possible to tell exactly where the gonococci lie.

Instillations of "Argyrol" and silver nitrate into the posterior portion of the urethra with a Guyon catheter after prostatic massage are of doubtful value to the prostate on account of the contraction of the musculature around the prostatic and ejaculatory ducts.

In England the variety of treatment of gonorrhœa in the female is extraordinary. Some are believers in strenuous douching, while at Harrow Road (the Lock Hospital for Women) different treatments varying according to the honorary may be seen. Even in the one hospital "Tampons of Ichthyol" and glycerine, eucalyptus oil and glycerine, "Contramine" and vaccines are exploited to the full. Cumberbatch and Robinson are obtaining great results from the use of diathermy particularly in gonorrhœa of the urethra and cervix. Four treatments in each instance in which the smear contained gonococci, they claim, have resulted in disappearance of organisms from the smears and in their continued absence. In vulvo-vaginitis of girls Harrison obtains the best results by introducing a urethroscope and swabbing the upper portion of the vagina with 20% solution of the crimson dye, "Mercurochrome 220." I saw the condition cleared up very quickly in several instances after months of treatment by other methods and did not see anything better on the Continent than this.

Wherever I went in the United States all the specialists had received their grounding in their work at Vienna. It was surprising to see one hundred and fifty American graduates in the American Medical Association there. Courses are given in every conceivable subject and I commend Vienna to every graduate desiring the best and latest. It is superior to Berlin. There you can catheterize as many ureters or examine with the urethroscope as many urethras or cauterize vesical papillomata as you wish. You can obtain courses in the anatomy of the genito-urinary tract or its histology and pathology by the most eminent of men. Professor Kyrle in the Finger Syphilis Clinic in a ten hour course on the diagnosis of syphilis demonstrated a patient for every statement that he made. As patient after patient came before us, we were astounded at the amount of material in Vienna. Just as in the genito-urinary section so it is in every other section. So great is poverty now in Middle Europe that Bauer in the venereal diseases section in the Frauenklinik states that 80% of all single women and 100% of all married have venereal disease in Vienna.

The best urethroscope is designed by Glengar. Everyone in Vienna, Czecho-Slovakia and Southern Germany uses it. Here it is. Glingar himself gives courses in it, as do others.

McDonagh states in his book "Venereal Diseases" that the urethroscope is useless and that though instructors on the Continent give courses in it, they do not use it on their private patients. This is not so. I have seen the instructors in Paris, Berlin and Vienna and they all use them on their private patients, indeed, one has only to see a polyp as in the posterior portion of the urethra causing a gleet, to see that any other treatment than that per urethroscope would be useless.

One or two small instruments I would like to demonstrate are: (i.) Suction apparatus for the

cervix in chronic endocervicitis. (ii.) Apparatus for applying heat to the vaginal cervix and adnexa.

Syphilis.

Just a few remarks on syphilis: I wrote in The MEDICAL JOURNAL OF AUSTRALIA in March last about the malarial treatment of cerebo-spinal syphilis.

More and more attention is being directed to clinical evidence of syphilis rather than dependence on the results of the Wassermann test. In every clinic I attended, the honorary has invariably impressed on students the necessity of early diagnosis before the result of the Wassermann test is positive and before the development of secondaries and has laid emphasis on the certain cure of syphilis by "Arseno-benzol" preparations at that stage.

This point must always be emphasized. I saw an instance six days ago in which a medical practicioner had been attending a man for the last six weeks with a typical hard sore and had allowed that man to marry seven days before I saw him. There is now a typical secondary rash and the result of the Wassermann test is positive.

In Vienna every known "Arseno-benzol" preparation is tested at the Finger Clinic. Kyrle states that the German "Salvarsan" and "Neo-salvarsan" are superior to any others.

Harrison is using the Boots' preparation "Stabilarsan" while the Americans use "Arsphenamine" and the French "Novarseno-billon" and "Luargol."

At the General Venereal Disease Hospital in Rome "Neo-salvarsan" was the favourite preparation.

Nowhere on the Continent did I see bismuth being used in preference to "Arseno-benzol" preparations. While in Berlin the insurance companies who give treatment under a health insurance scheme, were endeavouring to induce their physicians to give bismuth in preference to "914," but the profession opposed the idea.

The number of bismuth drugs is about two hundred and is being added to almost daily. "Trépol" and "Neo-trépol" are the favourites in France, but as antimony, mercury and quinine with their colloids are being added to the salts of bismuth and the suspensions are being made in oil or water, each bismuth preparation is apparently being superseded almost as soon as it is marketed.

In Vienna we were using "Bismojenol," an oily suspension. However, Harrison also will not admit that bismuth is superior to "Arseno-benzol" and places the therapeutic efficiency of "Arseno-benzol" preparations in comparison to the bismuth and mercury as ten to "Arseno-benzol," seven to bismuth and four to mercury.

SOME SINS AND SORROWS OF THE ABDOMEN.

By H. SKIPTON STACY, M.D., Ch.M. (Sydney),
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ONE of the reproaches to our profession is the vast amount of ill-health, mostly of a chronic nature, for which we are only able to apply palliative measures; in far too many cases, not even can we palliate.

As a consequence of this quite a large proportion of the population seek aid from without our portals, either from the nurse or chemist, their friends or from the advertising columns of the newspapers or hoardings. They help to amass a fortune for the patent medicine manufacturer who must smile genially at the labour and time we devote to the acquisition of our knowledge when he knows that leisure and riches can be acquired much more easily in another way. Why is this? I am afraid that we must confess that although in acute disease our knowledge and methods of treatment have made great advances of recent years, the same cannot be said of many of the more chronic ailments. I am not now referring so much to chronic disease of the heart, chest, nervous system and so on, which can more or less readily be recognized, but to those innumerable cases of vague ill-health some of which are evidently due to dyspepsia and others not so evidently, but which on examination in the light of modern conceptions and modern methods (the chief of which is radioscopy) will very largely come under the heading of alimentary derangements.

It is common knowledge amongst those who have been in general practice or in a hospital out-patient department that perhaps, with the exception of affections of the respiratory tract, most of the complaints can be sufficiently alleviated by either an aperient mixture or some preparation in which bismuth plays a conspicuous part; sufficiently alleviated so as not to bother the doctor again, but, I venture to say, in most cases not cured.

This can hardly be satisfactory to us if we wish to retain our title of being a scientific profession and it is certainly not satisfactory to the patient who comes more and more to rely on patent mixtures and pills, most of which are fortunately aperient in their action.

What is lacking in our knowledge? Is it that our various theories of disease do not wholly explain it, that faults of chemistry and of physiology are not wholly responsible, that bacteria, although playing a very important part, are not the initial cause although later they rather overwhelm the picture?

Has not the mechanical element been somewhat overlooked? Personally I am inclined to think so.

The more one practises as a general surgeon, the more one realizes the importance of "dependent drainage." With the exception of the Carrel-Dakin and the salt-pack treatments in which sepsis is combated by antiseptic and physiological means respectively, the basis of all treatment of septic wounds is dependent drainage; in its presence wounds heal readily; in its absence bacteria multiply, pus accumulates, toxins are absorbed and the wound never heals.

Even in the salt-pack treatment, the main factor is the stimulation of the lymph flow; comparative stagnation or stasis is replaced by a free flow.

In the human body, surgeons have found from practical experience that a leg is more apt to become gangrenous when the femoral artery alone is tied than when both artery and vein are ligatured. Apparently in the former case blood regurgitates

back through the vein into the venules and capillaries and then stagnates.

Again in plastic surgery; a pedunculated flap for filling a defect may necrose not for lack of nutrition, but for lack of lymph drainage; surface scarification will allow for this.

Again infection of the bulb (of all parts of the urethra) is the most difficult to cure in urethritis and hence the frequency of stricture in that situation. Reflection will show that natural drainage from there of pus is difficult; it must travel uphill before it reaches the pendulous urethra and thence the exterior.

Examples of the necessity of free drainage and avoidance of stasis in both organic and plant life could be multiplied.

Is free and unobstructed drainage necessary for the alimentary canal?

I venture to think so and to maintain that the prevention of it by any obstruction is the cause of much misunderstood ill-health.

Arbuthnot Lane has for many years laboured this point and has quoted intestinal stasis as the cause of most of the ills flesh is heir to.

By his over-zeal, especially in his extremely radical method of dealing with it (namely resection of the colon) he rather alienated the bulk of the profession.

But radiographic experts are helping to throw much light on the abdomen and by a careful study of the normal position and mobility of organs are able to recognize the abnormal with greater skill than used to be possible. The result of their work is to bring into unpleasant prominence the duodenum, caecum and ascending colon. On the appendix and gall bladder I will not dwell, because these have already received their fair share of blame for the many digestive disturbances which they create. I have no wish to minimize them, for I think only a surgeon can truly appreciate the mischief which the appendix particularly can cause in the way of obscure gastric trouble. Here the trouble is reflex in nature, causing pylorospasm.

A study of the literature, but more particularly a long experience of surgical practice has convinced me that in a great many cases there is a mechanical factor in disease, to which chemical processes and nervous impulses may be secondary, but which add to the discomfort and certainly obscure the clinical picture.

In patients subject to alimentary disorders, pallor is often an evident feature; they are frequently treated for anæmia, but pallor, like beauty, is often only skin deep; an extensive series of blood examinations many years ago convinced me that a great many people were dosed with iron, in whom the blood was perfectly normal as regards hæmoglobin and red cell count.

Enough iron has been wasted in medicine to construct a battleship; fortunately it is usually given with aperients which have minimized its ill-effects.

Headache is often a prominent feature; if the attending physician has a penchant for blood pressure, then the patient is dosed with vaso-dilators and restricted as to diet.

Perchance he or she is sent to a dentist who discovers pyorrhœa, in which case teeth are extracted and dentures substituted. After this, perhaps the endocrinologist takes a hand and attempts to explain many of the obscure symptoms by means of endocrine deficiency; in this he has been more than ably backed up by the manufacturing chemist who has flooded the market with abundance of literature and tablets (most of them useless). The surgeon has not been backward; if we may believe the physicians, the surgeons after having mobilized every fixed organ in the abdomen and immobilized every loose one, have sent the patient along to them, to be cured not only of their original complaint, but of neurasthenia made considerably worse by the frequent and varied operations.

The gynæcologist, never backward in opening the abdomen, occasionally takes a hand with a little ventro-fixation or oophorectomy to cure the backache of which the patients not infrequently complain. The oophorectomy may frequently do harm by upsetting the endocrine balance; partial atrophy of the thyreoid is said sometimes to follow this operation.

Radioscopic examination of the abdomen has unveiled frequent abnormalities as regards the attachment of the ascending colon; normally this is fixed to the posterior abdominal wall, but not infrequently the mesentery which is present up to birth, persists with the result that in the erect position the caecum and ascending colon sink downwards, but remain straight. It has great lateral mobility.

This prolapse may have varied effects:

(i.) Because of its attachment to the fascia over the right kidney, it may allow undue mobility of that organ with all its varied symptoms.

(ii.) Because of the excessive mobility of the hepatic flexure and the consequent lack of support for the proximal portion of the transverse colon, the second part of the duodenum to which the proximal portion of the transverse colon is attached, is pulled upon. This results either in angulation and partial obstruction of the duodenum or in a strain upon the first part, which may conceivably be a contributing factor in the causation of duodenal ulcer. The symptoms are often suggestive of duodenal ulcer; the X-ray appearances also resemble it in the rapid evacuation of the stomach and the doubtful deformity of the duodenum.

Through the gastro-colic omentum and greater curvature of stomach the strain due to the traction of the prolapsed colon may be transmitted to the lesser curvature; as the gastro-hepatic omentum is usually short and rather unyielding, the stress is felt most on the lesser curvature and as in the duodenum, may be a contributing factor in gastric ulcer.

(iii.) Occasionally traction is exerted upon the gall bladder, giving rise to symptoms of biliary

colic. The traction, either through the duodenum or gastro-hepatic omentum, sometimes affects the common bile duct for I have seen bile in the urine in cases of this nature; this, however, is uncommon.

(iv.) One of the most frequent results of the undue traction of the prolapsed colon is the strain upon the ileo-colic artery. This is transmitted to its parent trunk, the superior mesenteric, with the result that the duodenum is constricted in its third part. I have seen frequent and serious instances of this.

When the ascending colon is mobile, its mesentery and particularly the ileo-colic artery is not always long enough to follow the excursions of the gut without tension, hence the tension on the ileo-colic is transmitted to the superior mesenteric trunk and obstruction to the third part of the duodenum results; the greater the anterior convexity of the lumbar spine, the more likely is duodenal obstruction to occur. The superior mesenteric arises at the level of the first lumbar vertebra and crosses the terminal stage of the duodenum opposite the third. The lumbar segment of the spine is convex forwards and the summit of its convexity corresponds to the anterior part of the body of the third lumbar vertebra. Thus the superior mesenteric must pass forwards as well as downwards and then backwards as well as downwards.

Clinically the most evident feature is the attacks of acute epigastric pain, not related to food, culminating in vomiting and definitely relieved by flexion of the spine as produced by the squatting posture.

(v.) Traction upon the sympathetic plexuses is said to be the cause of much of the neurasthenia from which many of these patients suffer. Could not also this be the cause of the paroxysmal tachycardia, which one occasionally encounters in this class of case? Very frequently coldness of the feet particularly is a symptom. Is this due to vaso-constriction as a result of sympathetic stimulation or merely due to sluggish circulation, a very old and rather vague term.

The effects of traction are most definite under the following conditions: (i) Loading of the colon as in constipation. (ii.) The erect position. (iii.) With a complete mesentery. In some it is more evident than in others. (iv.) Laxity of the abdominal wall. Even though the muscles be strong, they cannot keep a colon with a mesentery up all the time.

Conversely if the ascending colon be in normal relationship to the posterior abdominal wall, its position is affected little if at all by laxity of the anterior abdominal muscles.

But there is another abnormality in which the caecum is prevented from sinking and in which the hepatic flexure approximates to the caecum, the colon collapsing like a concertina—the collapsed colon; or it becomes sharply bent at one point—the angulated type. In the skiagram the abdominal organs in both these varieties appear normal in the recumbent position; when the patient is in the erect position, however, the appearance is that of an irregular mass in the right iliac fossa. At operation also, the abnormality may not be very striking.

In these patients the symptoms usually included pain in the right iliac fossa, rather severe constipation and the general effects of stasis such as lassitude, pallor, headaches, constantly furred tongue and so on.

Occasionally the pain is acute and patients have even been operated upon for acute appendicitis. Nowadays we have learned not to attach much importance to the absence of fever in appendicitis, at any rate in its early stages.

Quite frequently the condition is mistaken for chronic appendicitis. I have met with cases in which the symptoms of collapsed or angulated colon are present, but operation has revealed constricting bands across the ascending colon, causing partial obstruction with consequent dilatation of the caecum; release of these bands cures. They have been chiefly in elderly patients. Are they portions of a Jackson's membrane which have undergone fibrosis with increasing age? Certainly in elderly people fibrous adhesions within the abdomen without any ascertainable cause are quite common.

Pain in the right iliac region and constipation is very frequently due to "Lane's kink," about 3.75 centimetres (1½ inches) from the termination of the ileum. This is very real and quite frequent and no operation on an appendix or other organ in the vicinity is complete unless it has been looked for and freed. Not infrequently the grid-iron incision has to be enlarged to deal with it; Weir's modification of the McBurney incision, through the rectal sheath but retracting the muscle and vessels medially, gives ample room.

Any one with an experience of general practice must have noticed that the type of patient most subject to digestive ailments is of spare build. This causes us to reflect whether there is anything in the anatomical "make-up" of the human body which might account for this. Investigations into this matter have been conducted by Goldthwaite [1] Cochrane [2] and others. Cochrane [2] classifies the build of the human body in three divisions: (*a*) spare, (*b*) average, (*c*) heavy. These types of build are hereditary, but like every other hereditary stigma may not appear in some members of a family, for naturally some may follow the paternal type, some the maternal, some may follow a type of a generation or more back. Paternal and maternal types are frequently not alike, owing to the selective instinct of the man who so frequently chooses his opposite in build as well as temperament.

Only the spare type (*a*) need concern us, for it is from this that our patients are mainly drawn. Certainly when the "heavy" become unduly heavy in later life, they contribute a certain quota. But why the "spare" type? I think it can be explained from an anatomical or mechanistic point of view. The whole figure is slender, the back is long and narrow; the lower ribs incline steeply downwards, forming a narrow sub-costal angle. The lungs and heart are somewhat smaller than normal. The abdominal viscera have peculiarities of shape and attachment. The stomach is long and tubular; the small intestine is shorter than normal; its mesentery is longer than normal, so that in the standing

position the small intestine occupies the lower part of the abdomen or pelvis. The large intestine is also more mobile; the caecum is unusually free and not infrequently the ascending colon is provided with a mesentery. There is very little retro-peritoneal fat in this type and the kidneys are less well supported. The sub-diaphragmatic space is less generous than in the normal and the diaphragm may occupy a very low position (Cochrane). Instead of walking with head and shoulders erect, the patient often walks about with bent head and round shoulders, knock-knees and everted feet. The bent head and round shoulders can be mechanically explained by the pull of the abdominal viscera which, having lost the support of the toneless anterior abdominal muscles or the relaxed muscles of the pelvic outlet, pull upon the diaphragm, thence upon the fibrous pericardium which is attached to the low cervical spine through the intermediary of the deep cervical fascia. The knock-knees and everted feet are due to the lack of tone in the supporting muscles and ligaments.

All the antero-posterior curves of the spine are increased, hence the superior mesenteric artery causes more pressure on the third part of the doudenum. An imperfectly acting diaphragm lessens the negative pressure within the thorax and the positive pressure within the abdomen with their resultant bad effects.

As regards the kidneys, Reiser [3] has shown that orthostatic albuminuria is due to renal stasis from compression of the left renal vein in arterial "pincers" composed of the aorta and superior mesenteric artery; these pincers become operative when the aorta is projected forwards by an increased lordosis or when the superior mesenteric is pulled to tautness by ptosis. Clinical experience of adolescent or orthostatic albuminuria together with the fact that the albumin is absent after the night's rest, makes me inclined to accept this theory.

I am not aware if the urine has been drawn off by the ureteric catheter in these cases; if so only the urine from the left kidney should contain the albumin.

Some day, perhaps, insurance companies may be disposed to look more lightly on this affection in the light of modern knowledge.

But it is not alone in this spare or viscer-optotic type that one gets these symptoms. In the female of any build after multiple pregnancies the abdominal muscles may become toneless or the pelvic floor relaxed (due to laceration). In consequence of this a variety of symptoms, similar to those in the type just discussed, may be present. The cause in these is a diminution in the intra-abdominal pressure, allowing ptosis of the viscera, with its resultant ill-effects. These symptoms are often accentuated at the menstrual period. Is this reflex or mechanical? Does the venous congestion in the lower segment of the abdomen cause more ptosis and thus act mechanically?

A vicious circle may be set up; the loss of weight and diminution of the retro-peritoneal fat as a result of the dyspepsia may allow a greater drag upon the sympathetic plexuses with its resultant neurasthenia; the loss of fat also allows a greater drag upon the kidneys.

Of course domestic and other worries may accentuate these dyspeptic symptoms, but probably rarely cause them. I believe that the number of cases of pure nervous dyspepsia can be materially reduced, since they are explainable on mechanical and anatomical grounds; that the nervous mechanism frequently acts only in the presence of the mechanical block. Unfortunately the primary organs at fault in the abdomen do not always speak for themselves but induce the stomach to do so for them, hence this unfortunate organ has been over drugged for generations and over-operated upon for decades.

Treatment.

In regard to treatment it is necessary to take a comprehensive view; in some cases the general surgeon, in others the gynæcologist, in others the physician is needed and last but not least the orthopædic surgeon with his physical educational exercises. In many, a combination of these will be required. Nor must the obstetrician be forgotten, for by his prevention of extensive laceration and immediate deep suturing of the perineal muscles, a woman may be saved much subsequent discomfort not only in the pelvis, but in the upper portion of the abdomen.

Palliative Measures.

Palliative measures in the main consist in improving the tone of the abdominal muscles and in increasing chest expansion; this is effected by suitable exercises. some of the physical culture institutions in the city may be said thoroughly to justify their existence and deserve our support. Next an abdominal belt, of which the Curtis is a good one, may be worn; this supports the lower part of the abdomen, and like corsets, should be applied in the recumbent position, while the organs are in reasonably good position. But if the chest is not elevated properly, the wearing of an abdominal belt would only compensate for part of the trouble. Obviously chest exercises are indicated; these promote descent of the diaphragm with increase of the intra-abdominal pressure; equally also an increase of the intra-thoracic negative pressure with resultant increased lung expansion. Outdoor games are excellent and always indicated, yet should always be accompanied by the special thoracic and abdominal exercises.

Perhaps the best of all outdoor exercise for these patients is to be obtained from swimming and rowing. Swimming combines pleasure and exercise. Surf bathing cannot be too strongly recommended; in this respect Australia is particularly fortunate. The movement of the water produces an exhilaration unequalled by any other exercise. The muscles generally are toned up and increase in weight often follows. Abdominal massage by a masseuse is directed at the muscles, the loss of whose tone is partly responsible for the trouble and the results are often splendid. Too often these measures are followed by relapse and need to be repeated. A holiday and freedom from domestic worry help very much, but usually give only temporary relief.

Mountain air is a good tonic. Of drugs aperients, such as liquid paraffin, the saline or other mild evacuants are the best; their action in giving relief is probably a mechanical one, by removing the load in the ascending colon and thus lightening the drag upon the structures to which the hepatic flexure is attached, also in lessening the drag upon the superior mesenteric vessels in those cases where the ascending colon prolapses. Bismuth, bromides and belladonna often give relief.

To assist in the action of the bowels, remaining in bed for breakfast often helps. The meal provides the stimulus for the emptying of the ascending colon; the recumbent position straightens out the angularity or collapse of the colon which appears in the erect position. The morning cup of tea sometimes effects the same object.

If the patient gets up for breakfast, the evacuation may be merely that of the lower bowel and give only partial relief.

Intestinal antiseptics have had their vogue, but it seems as if we are asking them too much, when we know from our experience of wounds that success depends upon several factors, namely sufficient concentration and innocuousness to the tissues; this can never be an easy matter in the alimentary canal, considering the dilution to which they are subject by the contents.

As to diet, moderation in sweets and starchy foods, together with avoidance of much fluid with meals, gives relief. It is important to avoid eating between meals. The partially obstructed channel must be allowed to get reasonably clear without adding more.

Surgical Measures.

Various organs have been stitched for ptosis, but does it not seem from the work of McConnell and Hardman [4], Waugh [5] and others that the one exerting its pull upon the others is the organ to deal with; in fixing the kidney, stomach or other organ are we not following one of the commonest fallacies in our profession, namely treating effect rather than cause.

Kellogg [6] performs duodeno-jejunostomy for chronic duodenal ileus; I have no experience of this operation.

If the investigation of McConnell and Hardman are correct, then fixation of the ascending colon will abolish the need for fixation of most of the others. In most, but not all, of the cases in which I have performed it, the results have been good. Caecopexy has been discarded, because of its frequent failure to relieve symptoms, but this is not surprising; one does not fix a falling sock at the ankle; that would still allow descent of the portion above. In women with uterine prolapse a complete operation would include repair of the perineum as well as colopexy. If the *recti abdominis* are widely separated, they should be brought together when the laparotomy wound is being sewn. After opening the abdomen, which can be done freely by a mid-line incision, search should be made for Lane's ileal kink (grades of which are really very common), also for Lane's first and last kink in the sigmoid, according to him first in point of time of formation and last in respect of position in the alimentary canal. I have not found this so frequently. Constricting bands across the ascending colon, causing partial obstruction with pain, constipation and distension of the caecum as a result are not uncommon. Mere division of the fibrous bands is apparently sufficient in dealing with these kinks. I think even Lane's ardour for an extensive operation has cooled; certainly every one else's has.

The retraction will need to be quite vigorous to stitch the colon from the mid-line. I have done this sometimes by an incision sloping obliquely towards the mid-line below and then retracting the rectus outwards. By this means one gets nearer the colon and yet sacrifices no motor nerves.

To make the colopexy more permanent it is better to undermine the peritoneum and make somewhat of a bed for the colon, then stitching the reflected peritoneum to its anterior aspect (preferably to the anterior longitudinal band). I use silk.

Conclusions.

(i.) That the mechanical is a very frequent factor in disease; upon this other factors may supervene and obscure the picture.

(ii.) That this is particularly exemplified in the case of the "spare" individual, whose construction lends itself to partial obstruction of the alimentary canal, with resultant dyspeptic and other symptoms.

(iii.) That similar symptoms often arise in the multiparous female, as a result of relaxation and loss of tone of the abdominal and pelvic musculature.

(iv.) That vague ill-health associated with a variety of symptoms is often due to an interference with the free and uninterrupted draining of the alimentary canal.

(v.) That thorough radioscopic examination, directed particulraly to the stomach, duodenum, ileum in its terminal part, caecum and ascending colon, in both erect and recumbent positions will in a great many cases, but not in all, furnish the clue.

(vi.) That for the relief of these symptoms laparotomy is often necessary.

(vii.) That apart from operative measures, anything that will improve the tone of the abdominal musculature and chest expansion, will do good. To this end chest and abdominal exercises are recommended. An abdominal belt often helps.

References.

(1) Joel E. Goldthwaite; "An Anatomic and Mechanistic Conception of Disease," *Boston Medical and Surgical Journal*, June 17, 1915.

(2) W. A. Cochrane; "The Importance of Physique and Correct Posture in Relation to the Art of Medicine," *The British Medical Journal*, February 23, 1924, page 310.

(3) W. and S. L. Rieser; "Orthostatic Albuminuria," *The Journal of the American Medical Association*, March 4, 1922, page 664.

(4) McConnell and Hardman; "Abnormalities of Fixation of the Ascending Colon," *The British Journal of Surgery*, April, 1923.

(5) G. E. Waugh; "The Morbid Consequences of a Mobile Ascending Colon," *The British Journal of Surgery*, January, 1920, page 343.

(6) E. L. and W. A. Kellogg; "Chronic Duodenal Obstruction with Duodeno-Jejunostomy as a Method of Treatment," *Annals of Surgery*, May, 1921, page 578.

Reports of Cases.

MUCOCELE OF THE APPENDIX.

By HUBERT K. PORTER, M.B., Ch.M. (Sydney),
Medical Superintendent,
Sydney Hospital.

THE patient, M.N., was admitted to hospital on March 15, 1924, complaining of pain and a swelling in the right side of the lower portion of the abdomen.

The history showed the pain to have been present for three years and to be intermittent, but very severe in character. There was no relation between the pain complained of and menstruation. Menstruation was normal. There was no constipation. The patient had difficulty in passing urine when the pain was present and prior to admission had been troubled with frequency. Apart from the fact that she had had two miscarriages, there was nothing abnormal in her gynæcological history. She had been curetted and had her right ovary and the left tube removed ten years previously at the Royal Hospital for Women. On vaginal examination the uterus was found in an anterior position and all structures were normal except that she had some tenderness in the right fornix and a band could be felt running out from the uterus across the fornix. Abdominal palpation revealed a globular mass in the right iliac fossa which, although the size of a large hen's egg, could be moved about and could be displaced downwards towards the pelvis.

At the operation under ether anæsthesia administered by the closed method on March 27, 1924, a large mass was found in the appendiceal region. It was adherent to the surrounding bowel. Its origin was very doubtful until it was isolated from bowel and omentum and it was then found to originate from the caecum in the position of the appendix. The proximal end of the appendix was of normal size and the tumour consisted of a grossly enlarged appendix. The tumour was removed and the abdomen closed in the usual way. The patient made an uneventful recovery and was discharged free of pain on April 19, 1924.

FIGURE (Illustrating Dr. Porter's Article).—Showing Mucocele of the Appendix.

Dr. Keith Inglis (Honorary Pathologist) reported on the specimen as follows:

"The specimen is a mucocele. Some of the mucoid contents (which are seen protruding from the upper surface in the middle) were embedded in paraffin. The sections showed amorphous material in which faintly staining nuclei could be seen. The specimen was mounted for museum purposes and the wall of the appendix has not been histologically examined."

Dr. Wardlaw examined some of the contents and found that it contained mucin and calcium phosphate.

The patient was under the care of Dr. G. Armstrong whose permission I have to report it.

HOUR-GLASS CONTRACTION OF THE STOMACH.[1]

By H. SKIPTON STACY, M.D., Ch.M. (Sydney).
Honorary Surgeon, Sydney Hospital.

A female patient, aged fifty-eight years, was admitted to hospital in May, 1924, under the care of Dr. Harold Ritchie. The patient complained of pain in the abdomen of fourteen years' duration. The pain had not been constant, but sometimes disappeared for as long as six months. For eighteen months prior to admission, however, there had been no remission in the pain. It was gnawing in character and extended right across the upper part of the abdomen. It was worse in the left hypochondriac region. It bore no relation to meals. Frequent vomiting relieved the pain. No hæmatemesis had occurred for eighteen months prior to admission. She had, however, vomited blood on several occasions prior to that. She suffered much from nocturnal cramps in the calves. Examination after admission revealed nothing beyond some tenderness in the left iliac region. Dr. Edwards examined the patient radiologically after the administration of a barium meal. He reported the presence of a penetrating ulcer on the lesser curvature of the stomach, causing hour-glass contraction. He thought that the contraction might be spasmodic. I saw the patient at Dr. Ritchie's request and advised operative treatment. At a subsequent median laparotomy I found hour-glass contraction of the stomach and this was evidently due to the cicatrization of an ulcer on the lesser curvature. The contraction was not quite so definite as shown in the skiagram, part of it being due to spasm as suggested by Dr. Edwards. I performed gastrectomy with anti-colic gastro-jejunostomy (Balfour-Pólya operation). The stomach was adherent to the pancreas and this added to the difficulty of the operation. Subsequent examination of the portion of the stomach removed revealed that the ulceration of the mucosa had healed, but that much scarring of the deeper layers was present. With the exception of some vomiting for the first two or three days the patient made an uninterrupted recovery. She is now free from pain and is able to take white meat *et cetera* without any discomfort beyond an occasional regurgitation of a little sour fluid into the mouth. On June 26, 1924, a radiological examination was made and the report was to the effect that the stomach emptied in less than six hours and that the meal emptied slowly through the stoma.

[1] Read at a meeting of the New South Wales Branch of the British Medical Association on July 10, 1924.

Reviews.

SURGICAL HANDICRAFT AND PHYSIO-THERAPY.

"A MANUAL OF SURGICAL HANDICRAFT AND PHYSIO-THERAPY" by J. Renfrew White is modestly stated by the author to be intended for the use of junior medical students.[1] A study of its pages shows it to be of great value not only to students, but to practitioners who will find in almost every section helpful information set forth with clearness.

Where all is so good, it is difficult to pick out special features, but the chapters on bandaging and the various surgical ligatures are very instructive.

The author still seems a little afraid of the use of opium after abdominal operations, and it is noted with some surprise he also recommends it as a local analgesic.

Altogether this book is one that will be very helpful to every practitioner and can confidently be recommended to every medical student.

[1] "A Manual of Surgical Handicraft and Physio-Therapy (For the Use of Medical Students)," by J. Renfrew White, M.S. (N.Z.), F.R.C.S. (Eng.); 1923. Dunedin, New Zealand: Coulls Somerville Wilkie, Limited; Demy 8vo., pp. 566, with index and 343 illustrations.

The Medical Journal of Australia

SATURDAY, SEPTEMBER 6, 1924.

The Panel System and its Alternatives.

SOME months ago Dr. Alfred Cox, the Medical Secretary of the British Medical Association, was asked to help the members of the Association in Australia by contributing to this journal an article or a series of articles on the experience of the medical profession in Great Britain in regard to national health insurance. Dr. Cox complied at once and suggested that if arrangements could be made for the reproduction of a series of articles published three years ago in *The Journal of the American Medical Association*, he would amplify these articles and bring them up to date. He further suggested that members of the profession in Australia should be referred to the report of the Court of Inquiry published in the supplement to *The British Medical Journal* in January of this year and to the other articles contained in the supplements to that journal published about the same time. The editor of *The Journal of the American Medical Association* has very kindly granted us permission to reprint the series of articles from his valuable paper. These articles have been faithfully reproduced without any amendment, alteration or variation of printing in our issues of August 16 and 23 and Dr. Cox's contribution to this journal appeared in our issue last week. Members are recommended to study these articles with care. We wish in this place to record our grateful thanks to Dr. Cox and to the editor of *The Journal of the American Medical Association* for the ready manner in which they have acceded to our request.

Dr. Cox's illuminative articles deal exclusively with the panel system applied to national health insurance in England. His concluding advice is embodied in a sentence beginning with the words: "If your country decided to have a system of national health insurance . . ." by which he means a panel system. He states that he is not competent to express an opinion as to whether any scheme of compulsory health insurance is or is not necessary for Australia. A few weeks ago we discussed this question and pointed out that the English scheme and the friendly society arrangements and all other known systems of contract attendance on persons of small means must of necessity leave out of consideration a large section of the population whose ill-health and physical disabilities constitute a grave economic burden to the nation. The medical profession in Australia has already expressed the opinion that all known systems of medical benefit under a national health insurance scheme are neither necessary nor desirable in Australia. This may be taken to mean that the wage-earner is adequately provided for under existing conditions through the friendly society lodges, the hospitals and other provident organizations. Dr. Cox relates how the British Medical Association in England has fought for point after point in order to render the panel system more acceptable and more remunerative and how its advocacy has at the same time been directed toward the improvement of the service to the insured person. The patient or rather the insured person has now the right to select his or her panel doctor; the panel doctor is prevented from having so many persons on his list that he cannot give serviceable attendance to each patient. The British Medical Association has succeeded in referring matters at issue between itself or the profession and the Government to arbitration. The approved societies have been excluded from the administration of the medical benefit, although the approved society representatives apparently have some say in this matter through the insurance committees. The system of control of the medical service and the prevention of extravagant prescribing seem to be reasonable and acceptable to the medical practitioner in England and to have resulted in a materially improved medical service. All the information, all the argument, all the advice that Dr. Cox has to give, will tend to strengthen the determination of the medical practitioners in Australia not to accept any known panel system for medical benefit.

It is, however, undeniable that the interests of public health demand that something should be

done to raise the standard of health of the community, to maintain the earning power and to reduce unemployability arising from physical defect or actual illness. Health insurance is an unhappy term. No one can insure that a person will maintain or regain good health. The Government can relieve the person of the burden imposed by ill-health. The Government can do more. It can call into being machinery calculated to reduce the total amount of ill-health and disease and to raise the general level of efficiency of the whole population. Treatment applied to the individual is of very small moment to the nation; treatment applied to every individual, constituting what has been termed mass amelioration, may be of the greatest value to the nation as a prophylactic measure. The medical profession should recognize that medical benefit must be extended to the destitute, the incapacitated and the decrepid if it is to have any prophylactic value. The Royal Commission is seeking guidance from the medical profession as to the best method of applying an insurance scheme to improve the standard of health of the community and to enhance the earning capacity of the nation. Two distinct systems can be devised and should be advocated by the profession. The first is concerned with the modern application of hygienic methods for the control of preventible diseases and includes a plan for the cooperation of the general practitioner and the administrative health officer. The other embraces some provision for the proper control of all persons during illness and physical disability and includes the best forms of treatment for the whole community, in order that the period of disability may be reduced to a minimum. There is no necessity to invoke the panel system or indeed any direct contract arrangements to achieve this end. With the experience of England before us, we should be able to establish sound principles on which a workable scheme could be based.

Current Comment.

FOREIGN BODIES IN THE BRONCHI.

IN March of this year Dr. L. D. Cowling reported the occurrence of dyspnœa, stridor and cough in a child who had aspirated a peanut. There was at first no cyanosis. No foreign body was detected by radiographic examination. Later when cyanosis appeared, the child was given an anæsthetic and tracheotomy was performed. Dr. Cowling does not record the reasons supporting the diagnosis of a foreign body in the air passages, but merely states that a long silver wire hook was passed along the entire length of the trachea and a peanut delivered. The child had previously been inverted and shaken. A couple of years previously Dr. C. T. Turner lost a patient who had inhaled a green pea into a bronchus. In 1921, Dr. W. J. Hull performed tracheotomy on a small child who had inhaled a peanut and made an unsuccessful attempt to remove the foreign body which was lodged at the bifurcation of the trachea. The child died.

Foreign bodies frequently find their way into the trachea and bronchi and the possibility of this accident should always be in the mind of the practitioner when confronted with a patient with physical signs in the lungs not conforming with those of the known pathological processes. Professor Thomas McCrae has selected this subject for his Lumleian Lectures and has some very important messages to deliver to the general practitioner and to physicians who have had small experience of this dangerous accident.[1] The variety of the substances that are found in the bronchi is very great. He admits that the experience at the Jefferson Hospital whence the reputation of Chevalier Jackson in connexion with bronchoscopy attracts a very large number of patients, is unusually wide. They have had patients with objects varying from an oyster to a small fragment of a seed. Of the metallic bodies pins, safety pins, tacks, nails, dental burrs, bullets and toys and of the vegetable bodies nuts, water melon seeds, grains of corn, beans, almonds and the like were found in large variety. Professor McCrae repeats again and again that the vegetable bodies are the more dangerous, for sooner or later a virulent infective process is set up which will inevitably kill the patient unless the foreign body is removed. All foreign bodies on entering the bronchi may cause death and it is in consequence of paramount importance that the diagnosis should be made at an early stage and that an expert should be requisitioned to remove them. He points out that quite often little or no distress is occasioned at first. Sometimes weeks, months or even years elapse before dangerous symptoms present themselves. The patient may be unaware of the fact that a foreign body has passed into the air passages. The patient may be a young child and thus unable to give any warning. Or he may aspirate the body during anæsthesia and on awakening be unconscious of the event. More frequently the object is held in the mouth and disappears as a result of a sudden or unexpected movement on the part of someone else. The patient and it may be his medical adviser are disinclined to attach any importance to this disappearance of the object, because of the absence of dyspnœa or respiratory distress. Young children react more severely to the irritant action of foreign bodies. Those of vegetable origin give rise to

[1] *The Lancet*, April 12, 19 and 26, 1924.

greater irritation than do the metallic bodies. There may be some trauma to the mucous lining of the trachea or bronchi and unfortunately there may be additional trauma produced during unsuccessful attempts to remove the foreign body. Often the foreign body moves about and in doing so may inflict a local injury in each new site. The absorption of moisture by a body like a bean may cause it to swell and give rise to pressure symptoms. The immediate effect of the aspiration of a foreign body naturally depends on its size, shape and character. If it occlude the main bronchus or, in the case of a bronchus supplying a lobe, a lobe, there may be collapse or the lung may become water-logged. Compensatory emphysema is often found in the unaffected lung. The skiagram will reveal the condition of the lung, even if the foreign body is not opaque to X-rays. Sometimes the air may pass into the lung, but not out. The affected lobe or lung becomes over-distended. This is known as obstructive emphysema. The physical signs as a rule are definite enough to permit an accurate diagnosis. The foreign body may produce a partial blocking, in which event the air content and the movement of the affected area of lung tissue will give sufficient indication to facilitate an exact diagnosis. Professor McCrae describes in considerable detail the signs and symptoms met with under varying conditions. While the reader should find this description very useful, no difficulty should be encountered in correlating these signs and symptoms with their cause. The physician is urged to make very careful examination of the chest in the usual manner. An X-ray examination should always be carried out, even when it is known that the foreign body is of vegetable origin. The information to be gained from the skiagram, taken in conjunction with the physical signs, will enable the practitioner to ascertain the nature of the obstructing body, the degree and kind of change that has already taken place and the exact situation of the lodgement. The differentiation from pulmonary tuberculosis is quite easy and confusion suggests that the history, the signs and symptoms and the course have not been closely studied. Diphtheria is at times diagnosed, as is pneumonia. Bacteriological examination, a consideration of the clinical signs and symptoms and the appearance observed by direct laryngoscopy will eliminate the former error, while the physical signs and the result of X-ray examination should distinguish foreign body from the latter. Professor McCrae mentions that patience and repeated examination may be necessary, more especially repeated examination at short intervals. Great difficulty may be experienced in differentiating between a foreign body in a bronchus and a new growth. This condition, however, is so rare that from a practical point of view it is not important. Bronchoscopy may be required if direct laryngoscopy does not yield sufficient information. Bronchoscopy should not be attempted by anyone not specially trained in this kind of work. A foreign body may be expelled without artificial aid. In the case of small fragments of seeds, nuts and similar bodies it occurs, but reliance should not be placed on such a favourable issue. Chevalier Jackson has had extraordinarily good results from his skilled removal of foreign bodies. He has not failed to remove a single foreign body except when the patient was admitted in a dying condition and reasonably propitious conditions did not exist. A successful result as far as life is concerned was attained in 99%. Professor McCrae is guarded in speaking of prognosis, but it is quite obvious that in skilled hands recovery will usually follow, provided that a correct diagnosis is made at an early stage and treatment is not long delayed. The author holds that it is very unwise to invert the patient in the hope that the foreign body may be shifted through the glottis. If it is moved in this way by gravity, impaction of the foreign body in the glottis may lead rapidly to death. If sub-glottic œdema is present, it should be remembered that there is definite danger of complete obstruction. The practitioner should be prepared under the circumstances to perform tracheotomy at short notice. Sub-glottic œdema occurs not infrequently in young children after bronchoscopy. It thus appears that the message he has to give, is that when there is any possibility of a foreign body having entered the air passages, an accurate diagnosis and immediate and skilful removal are essential.

AIR EMBOLISM IN OBSTETRICS.

The entrance of large quantities of air into the veins is fraught with great danger. Large quantities become churned up in the cavities of the right side of the heart and form a spumous, frothy mixture amongst the *columnæ carneæ* which the heart can eject only with great difficulty. Death results from anæmia of the lungs and brain.

Air embolism has been of comparatively frequent occurrence in the course of surgical operations and unfortunately it is not unknown in the practice of obstetrics. In order that a diagnosis of air embolism may be confirmed, two things are necessary. The characteristic appearance must be found in the heart at *post mortem* examination and it must be proved that gas-forming organisms are not present in the blood. This has recently been demonstrated in a report made by Dr. James A. Gough.[1] In investigating his case Dr. Gough fulfilled these requirements. The patient, a woman, aged twenty-five years, was being confined for the first time. Prolapse of the cord occurred during the second stage of labour and an effort was made to return the cord to the uterine cavity. The child was finally delivered by forceps. The patient who was under anæsthesia, became collapsed and died seven hours later after the most acute respiratory distress. At autopsy the heart was opened under water. The right ventricle contained much free air and frothy blood. The pulmonary arteries also contained frothy blood and were free of thrombi. The heart muscle was pale and the valves were normal. Although pyelitis and acute parenchymatous degeneration of the kidneys were present, no gas-forming organisms were obtained on culture of the blood. Microscopical examination of the tissues revealed no abnormality.

[1] *Surgery, Gynecology and Obstetrics*, July, 1924.

Abstracts from Current Medical Literature.

MORPHOLOGY.

Visual Cells in the Retina.

S. R. DETWILLER (*Journal of Comparative Neurology*, December 15, 1923) shows that the conical shaped visual cells found in the earlier stages of development of Amblystoma must not be regarded as cones, but as indifferent cells which give rise to both rods and cones. Thus rods which are the more primitive visual cells, do not arise from cones which are specialized cells, but from cone-like cells. Histological examination suggested that the early cone-shaped visual cells could be divided into two groups: (i.) Larger cells, the nuclei of which project through the external limiting membrane and with a lamellar arrangement of the material of the outer segment—rod progenitors; (ii.) smaller cells whose nuclei lie beneath the external limiting membrane and give rise to cones. These conclusions were tested experimentally by comparative measurements on retinæ taken from larvæ in which the eyes were beginning to function (twenty days after tail-bud stage—stage 44). When the eyes of such larvæ which have been exposed to diffuse daylight, are compared with those kept in darkness, a difference of 7.3μ in the length of the myoid of the small conical visual cells is noted, but no difference is perceptible in the large conical cells. These results agree with the behaviour of mature rods and cones in which Laurens and Williams found a cone contraction of 7.7μ and a doubtful rod elongation of 1 to 1.5μ in the light.

The Human Hand.

T. S. KIRK (*Journal of Anatomy*, April, 1924) describes certain features in the mechanism of the hand which were discovered as a result of attempting to construct an artificial hand. He found that the finger, when considered as a mechanical unit, consists of the phalanges and the metacarpal bone. In closing the fist there are required strong flexion of the fingers and moderate extension of the metacarpal bones. The pull of the flexors on the fingers towards the middle line is counteracted by the strong dorsal interossei muscles. Palmar pads are essential for effective palm grasp. The ulnar pad is the largest and most useful and, unlike the others, is free to be displaced. It is held in position by the *palmaris brevis* muscle.

Epiphyseal Centres of Ossification.

J. HAMILTON (*Journal of Anatomy*, April, 1924) describes a process to bring ossific centres into view. The bones require to be either fresh or from "Formalin"-hardened specimens. They are first cleaned, then slowly dehydrated. The next step is clearing which must not be carried too far. To complete the process the bones are then embedded in a mixture of gum mastic and gum sandarac dissolved as far as possible in Xylol and then allowed to evaporate to the consistency of thin cream. The bones are soaked in this till it has become very thick (six to eight weeks) and then carefully dried in an atmosphere free from dust. They may then be handled.

The Œstrus Cycle in the Opossum.

CARL HARTMAN (*American Journal of Anatomy*, November 15, 1923) following on the work of Selenka (1887) and Hill (1911) on the œstrus cycle in marsupials, has investigated this phenomenon in the opossum. He used as material over one thousand female opossums and applied the method of mammary palpation together with the examination of vaginal smears as the best means of determining approaching sexual activity and of pregnancy or pseudo-pregnancy. He finds that the cyclic changes in the opossum ovaries parallel the changes in the ovaries of other mammals in every essential and that the marsupials and Eutheria are in the closest agreement in all steps of the œstrus cycle. There is little accurate data upon the period of gestation in any marsupial, but it is believed that twelve to thirteen days is very nearly correct for this period. On investigating the length of the cycle, it was found that it varies greatly as it does in other mammals, but this could only be expected of a wild animal subjected to the deleterious condition of crowded cages. However, twenty-eight days are very near the average length of the cycle in the opossum. Hartman claims to have definitely proved the opossum to be polyœstrous and thinks that the Australian forms, including Dasyurus studied by Hill and his students, may likewise be found to be polyœstrous upon detailed observation covering long periods. The opossum ovary undergoes the same rhythmical changes as that of other mammals. The follicles increase to a maximum at œstrus, ovulation takes place spontaneously, the *corpora lutea* form after ovulation, reach their full structural and functional development and degenerate. The opossum outdoes all Eutheria in the diœstrus swelling and subsidence of the mammary glands. As has been established for all mammals so the prœstrus growth of the organs in the opossum is under the control of the ovary. Ovariectomy completely obliterates the œstrus cycle. The Graafian follicles constitute the source of stimuli that lead to prœstrum and to œstrus and the *corpora lutea* probably continue the work begun by their precursors the Graafian follicles. There is evidence in the opossum that in case of failure of ovulation the atretic follicles may cause a profound stimulating effect on the uteri and mammary glands so that pseudo-pregnancy of considerable intensity results as normally with *corpora lutea*. Pseudo-pregnancy consists of changes simulating pregnancy, hence of changes in preparation for the nidation of the embryo. This phenomenon is decidedly present in the marsupials. Uteri and mammary glands of pregnant and non-pregnant animals are indistinguishable and in a given case the condition can only be decided by examination of the contents of the uteri. Pseudo-pregnancy may be associated with the high development of the *corpora lutea*, and the relation of the former to the latter is supported by the experiments of Ancel and Bonin (1910) who produced essentially the condition of pseudo-pregnancy in the rabbit by means of sterile coitus with a vasectomized male. Thus pseudo-pregnancy is manifested by both Eutheria and marsupial mammals. Marsupials differ in the spontaneity and in the exaggerated form of the phenomenon. Pseudo-pregnancy is followed by degeneration of the uterus, involving both glands and epithelium. The vagina exhibits cyclic histological changes in every way comparable to similar changes in the rodents thus far studied. The homology of the lateral vaginal canals which are distinctly marsupial structures, is not clear. The canals remain closed posteriorly until puberty as does the vagina of rodents. They become patent by the appearance of a lumen within the epithelial layer. Shell membrane glands, perhaps homologous of those found in the Sauropsida, were discovered in the lower portion of the opossum oviduct.

MORBID ANATOMY.

Sub-dural Effusion and Internal Hydrocephalus.

WILDER E. PENFIELD (*American Journal of Diseases of Children*, October, 1923) reports an instance of sub-dural effusion and internal hydrocephalus in an Italian boy, born of healthy parents at full term after an easy labour. There were no tuberculous contacts. At seven months the patient began to crawl. About this time there appeared a purulent discharge from the left ear. At nine months, the first tooth appeared and the infant was trying to walk. He seemed to be ill and feverish and the parents attributed this to his teething. From this time development stopped. At thirteen months, he began to have attacks of vomiting. At fourteen months, it was noted that the baby's head was growing larger and the fontanelle was found to be open. A month and a half later the eyes became crossed and shortly afterward the child became blind. At sixteen months the pupils reacted to light, but the baby gave no evidence of vision. There was papillœdema, the deep reflexes could not be elicited and the abdominal and cremasteric reflexes were absent. Plantar stimulation caused extension of the great toes. By means of lumbar puncture one cubic centimetre of neutral phenolsulphonephthalein was injected into the lumbar sub-arachnoid space. An hour later a needle was inserted into the left angle of the anterior fontanelle. It was the intention to puncture the lateral ventricle, but as soon as the point of the needle passed

through the resistant dura, fluid appeared and was collected. This fluid contained none of the dye. It was clear and pale yellow in colour. The lumbar fluid had been colourless. The next day a needle was again passed just through the dura at the same point, forty-five cubic centimetres of amber fluid were withdrawn and replaced by an equal amount of air. It was found that the air was not confined in a cyst, but passed over the surface of the brain. It was apparent that the air was not extra-dural because it outlined the falx and tentorium, that it was not beneath the arachnoid is evident for the same reason and because it did not follow the inter-gyral spaces. A week after the first air injection forty cubic centimetres of air were introduced into the sub-arachnoid space by means of lumbar puncture. The air entered the ventricular system and even passed into the basal cisternæ and on into the sub-arachnoid inter-gyral spaces. Thirteen days after admission the boy could see light for the first time probably owing to the decompression puncture. Seven weeks after admission dural punctures were made to the right and to the left of the mid-line. From the right side came light yellow fluid and from the left darker yellow fluid. A third needle in the lumbar sac produced clear colourless cerebro-spinal fluid. Phenolsulphonephthalein injected through this needle into the sub-arachnoid space did not appear in either of the other fluids within twenty-five minutes. The conclusion was reached that there was no connexion between the fluid cavities on either side of the mid-line, nor between them and the sub-arachnoid fluid. The cerebro-spinal fluid was always clear and colourless. At the first lumbar puncture, there were one hundred and ninety cells per cubic centimetre (all lymphocytes) and no globulin was found. The number of cells rose as high as 3,400 on one occasion (96% lymphocytes). The cells in the sub-dural space were generally more numerous, but varied between nine cells and 16,000 cells per cubic millimetre. They likewise were all lymphocytes. Chemically the sub-dural fluid differs very materially from the spinal fluid. In this there was only a trace of protein, in that protein was relatively high (0.5% and 1.5%). Wassermann tests on the blood and all three fluids repeatedly failed to yield a reaction. The von Pirquet test for tuberculosis did not produce a reaction and injection of both sub-arachnoid and sub-dural fluids into guinea pigs did not produce tuberculosis. Cultures of all fluids consistently yielded no result. At the age of thirty-two months, sixteen months after his first admission, the patient was active and sturdy and equal in development to his brothers and sisters at the same age. The author assumes that at nine months of age there was exudation of fluid into the sub-dural space, associated with or caused by an inflammatory process which gave rise to the fever reported at that time. The fluid continued to accumulate, giving rise to cerebral compression. The pressure was not due alone to expansion of fluid in the sub-dural space, but also secondarily to the damming back of the ventricular cerebro-spinal fluid by local compression of the sub-arachnoid pathways beneath, in the sulci and on the surface of the brain. The author states that it is difficult to escape the conclusion that the sub-dural effusion is causally as well as in point of time secondary to the *otitis media*. If the primary process was a chronic mastoiditis which occasionally became acute, the explanation of the six sharp rises in temperature during the stay in hospital would be evident. Some of these rises, possibly all, were associated with a leucocytosis with high polymorpho-nuclear leucocyte count; while the cellular reaction in the sub-dural and cerebro-spinal fluid was wholly lymphocytic.

The Preparation of Dry Bone Specimens.

W. E. M. WARDILL (*Journal of Pathology and Bacteriology*, January, 1924) has made a bacteriological examination of the fluid in a macerating jar where the process was observed to be advancing rapidly. From the fluid *Staphylococcus pyogenes aureus*, *Bacillus proteus* and *Bacillus sporogenes* were isolated. Based on this observation the following method has been elaborated: Specimens should be free from any traces of antiseptics. The material is placed in deep pots and totally immersed in warm water. A mixed culture of the organisms isolated as above is then introduced and the jar covered with a closely-fitting lid. Small specimens may be placed in an incubator at body temperature. Larger specimens are placed in close proximity to a stove or radiator. The specimen is examined at intervals of a few days. When the tendinous attachments separate quite easily, maceration is regarded as complete (five or six to fifteen days). The specimen is then boiled in a solution of washing soda till almost all the odour has gone. The specimen should be found then to be ivory white in colour and free from fat. No other bleaching agent or fat solvent is required.

Adeno-myoma of the Uterus with Tuberculous Infection.

R. W. JOHNSTONE (*The Journal of Obstetrics and Gynæcology of the British Empire*, Summer Number, 1924) states that microbic infections of uterine fibroids are uncommon and tuberculous infection is one of the rarest varieties. It would appear that the capsule of a fibroid which renders it prone to degeneration, protects it in some measure from microbic infection. Conversely it is not surprising to find that adeno-myomata of the uterus which are in the majority of cases diffuse and unencapsuled, and in which the glandular areas are usually more or less directly derived from the vascular uterine mucosa, are comparatively immune from degenerations. On the same line of reasoning injection and malignant invasion might be expected to be more common in these tumours owing to the absence of a resistant capsule. Experience, however, shows that this is not so, for it is found that while such a cystic degeneration of adeno-myomata is rare, malignant or infective changes are still rarer. The author has found only six cases of tuberculosis in uterine adeno-myoma recorded in the literature. He discusses these cases in detail and then records the notes of his own patient, a female, aged forty-five years. The uterus contained two swellings in the posterior wall, the larger being about the size of a plum. The structure of these tumours was that of a diffuse adeno-myoma and they were infiltrated with tuberculous nodules and giant-cell systems. The distribution of these nodules appeared to be mainly but not exclusively in the cellular mantle of the glandular elements. The anterior wall of the uterus was 2.5 centimetres thick, but manifested no clear evidence of adeno-myoma. Tubercles were present in the cornual swellings of the left tube which presented many cystic spaces lined with glandular epithelium, but with little or no cellular stroma around them. This is characteristic of *salpingitis isthmica nodosa* and also, according to Sampson, of adeno-myoma growing from tubal epithelium. There was no clear evidence of tuberculosis in the right tube. The author regards the infection as blood-borne to the endometrium and later passing into the wall of the uterus.

Primary Sarcoma of the Stomach.

H. S. THATCHER (*Archives of Internal Medicine*, July 15, 1924) reports an instance of spindle-cell sarcoma of the stomach with metastatic sarcoma of the liver. Sarcoma of the stomach is rare, constituting 1% of gastric tumours according to Ewing. The author's patient was a man, seventy-seven years old. The primary growth was located at the cardiac end of the stomach and was thirteen centimetres wide and 10.3 centimetres long. It was five centimetres thick near the centre, firm, hard, greyish-white and cut with resistance. Most of the tumour mass was along the greater curvature. The centre of the tumour was definitely ulcerated, soft and irregular. The liver was studded with huge nodules, the largest measuring 2 by 1.8 centimetres in its largest diameters. The cells in the primary tumour were arranged in bundles and had replaced the normal tissue. The bundles and cells were closely packed together. The cells were spindle-shaped and the majority were large hyperchromatic and irregular. The nuclei contained much chromatin and there were nucleoli in 80% of the cells. The nodules in the liver contained cells closely resembling those in the primary lesion. Normal liver tissue surrounded these nodules, but the liver cells immediately surrounding the tumours were pyknotic and loosely arranged. On the outer edge of the nodules were islands of pyknotic liver cells.

British Medical Association News.

SCIENTIFIC.

A MEETING OF THE NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION was held at the Sydney Hospital on July 10, 1924. The meeting took the form of clinical demonstrations by the members of the honorary staff.

Hour-Glass Contraction of the Stomach.

DR. H. SKIPTON STACY showed a female patient on whom he had operated for hour-glass contraction of the stomach (see page 252).

Appendicostomy for Chronic Dysentery and Anæmia.

Dr. Stacy's second patient was a man, aged fifty-one years, who had been admitted to Sydney Hospital on March 1, 1924, complaining of alternating constipation and diarrhœa. He had noticed bright blood in the motions on several occasions and also a good deal of mucus. He had also had intermittent pain in the right iliac region. Occasional attacks of vomiting had occurred during the night and he had complained of anorexia and general weakness. He had lost much weight. He had suffered from some frequency of micturition and slight scalding. Dr. Stacy pointed out that with the exception of the dysentery the symptoms were all of five or six months' duration. Inquiry into the past history revealed the fact that the patient had had measles, scarlet fever, gonorrhœa and syphilis. He had contracted dysentery in France with the Australian Imperial Force and had been invalided home on this account.

Examination after admission had revealed obvious loss of weight, much pallor and general weakness. The liver dulness had been slightly increased and there had been some tenderness on palpation in the right iliac region. The urinary system had been normal. Examination of the blood had revealed the red cell count as 3,000,000 per cubic millimetre, the hæmoglobin value as 50% and the colour index as 0.83. The leucocytes had numbered 8,700 and of these the neutrophile cells had been 78%, eosinophile cells 1% and lymphocytes 21%. The patient had been submitted to radiological examination and the radiologist had reported that the stomach and duodenum were normal and that there was no irregularity or filling defect in the colon. Blood examination two weeks later had revealed the erythrocytes to number 2,750,000 per cubic millimetre. There had been definite poikilocytosis and no variation in the staining reaction and no nucleated red blood cells had been seen. The hæmoglobin value had been 55% and the colour index 1.0. The leucocytes had numbered 10,000 and this number had been composed of neutrophile cells 48%, eosinophile cells 2% and lymphocytes 50%. A week later the erythrocytes had numbered 2,000,000. There had been considerable variation in size. Three nucleated red cells, intermediate between normoblasts and megaloblasts, had been seen. The leucocytes had numbered 11,000 and of these the neutrophile cells had constituted 66%, the eosinophile cells 4% and the lymphocytes 30%. The serum had not reacted to the Wassermann test. The stools had been examined for amœbæ, but none had been found. Dr. Stacy pointed out that at this time the diagnosis had rested between malignant disease of the caecum or colon, tuberculosis of the same region, pernicious anæmia and bacillary dysentery. Dr. Holmes à Court had been consulted as to the wisdom of carrying out blood transfusion. He had advised against it for the time being and had recommended the administration of dilute hydrochloric acid with meals in doses of 3.5 cubic centimetres (four fluid drachms). This had been done on April 15, 1924.

Very slight improvement had followed the administration of iron and arsenic. Dr. Stacy said that as he feared malignant disease, he had thought it wise to do an exploratory laparotomy. In this Dr. Ritchie who saw the patient, had concurred. Dr. Corlette had also agreed that in the absence of malignant disease bacillary dysentery was the probable cause of the condition. This had confirmed his decision to perform appendicostomy. On March 25, 1924, a median laparotomy had been performed and no evidence of neoplasm or of tuberculosis had been found. Appendicostomy had been carried out through a gridiron incision and a No. 3 Jacques catheter had been sewn in the stump of the appendix and brought out through a stab incision just below the wound. Through this the colon had been washed out twice daily with saline solution. From this the patient had continued to improve rapidly. Blood examination had been carried out on May 5, 1924, and the red cells had numbered 4,500,000, the hæmoglobin value had been 75% and the colour index 0.83. The leucocytes had numbered 9,000 and of these the neutrophile cells had been 64%, the eosinophile cells 2% and the lymphocytes 34%. After discharge from hospital the patient had continued to irrigate the colon through the wound until an attack of influenza had laid him low. During this attack he had ceased irrigating and as a consequence the wound had closed so that he had not been able to continue the treatment. He had continued taking iron and arsenic and the dilute hydrochloric acid, but his blood count on the day of the meeting manifested some relapse. At the same time the patient felt very well and was back at his usual occupation. The blood count was as follows: Erythrocytes 3,250,000, hæmoglobin value 70%, colour index 1.07, leucocytes 13,000 per cubic millimetre, neutrophile cells 68%, eosinophile cells 3%, lymphocytes 29%.

Dr. Stacy said that the retrogression in the blood condition was almost certainly due to the closure of the appendicostomy wound and cessation of the colonic irrigation. The patient felt well, however, and was averse to giving up time from his work to have the wound reopened. The patient had promised to return later on. Dr. Stacy thought that it was probable that a hæmolytic streptococcus was associated with the organism causing the dysentery.

Extra-Genital Chancres.

DR. G. R. HAMILTON showed photographs of extra-genital chancres in a variety of situations. These included chancres of the nose, three of the cheek, the chin, four of the finger, the tongue, the umbilicus, the arm, two of both lips, four of the lower lip, the upper lip and the upper eyelid.

Alopecia Universalis.

Dr. Hamilton also showed a female patient, aged thirty-two years, who was suffering from *alopecia universalis*. At the age of four years the patient had had very long hair, but at that age it had begun to fall out in patches. The hair grew again, but other bald patches appeared. By the time the patient was nine years of age she had been completely bald and had remained so ever since. Four months prior to demonstration the eyebrows had disappeared and more recently the outer half of the eyelashes on the right upper lid had fallen out. The patient had no hair on other parts of the body. Dr. Hamilton stated that all kinds of lotions and gland therapy had been tried without success.

Angio-Serpiginosum.

Dr. Hamilton's second patient was a male, aged twelve years, who was affected by *angio-serpiginosum*. A nævus had appeared on the patient's right shoulder and on the upper part of the right arm, when he was eighteen months old. Four months prior to demonstration little red telangiectases had appeared on both upper eyelids. Since that time these had gradually spread down both cheeks and across the nose and also on to the neck. Dr. Hamilton said that Hutchinson likened the minute spots to cayenne pepper grains and had called the disease infective angioma. The only other nævus present was a small vascular patch on the roof of the mouth. The patient was the seventh child of eight children and none of the others were similarly affected.

Cerebral Tumour: Bilateral Sub-Temporal Decompression.

DR. GEORGE BELL, O.B.E., showed a male patient, aged thirty-six, a steward, who had been admitted to Sydney Hospital under the care of Dr. Harold Ritchie on July 20, 1923, complaining of headache. The family history had

contained nothing abnormal. The patient had suffered from orchitis in 1916 and had stated that he smoked four ounces of tobacco a week. His chief complaint had been that he had suffered from almost continuous headache for about six months before admission. The headache had started in the right temporal region. The pain had been severe and had been felt on an average once in two weeks. Later on it had become more frequent and had been less severe four months before admission when he had begun to vomit in the early morning. Vomiting had not been preceded by nausea. The vomiting had occurred almost daily at about 7.30 a.m. until two weeks before admission, but since then had become less frequent. The patient had only vomited six times between the time of admission and that of decompression. Three months before admission the eyesight had become dim. At times the patient completely lost all vision and this was accompanied by headache and vomiting. Up to one month before admission the patient while walking was suddenly seized with an attack of headache, vomiting, loss of vision and partial loss of power in the lower limbs, especially the right. With each attack he had suffered from pain in the sacral region. Palpitation had always been present after an attack and he had lost 6.3 kilograms (one stone) in weight in three months. The headache had commenced in the right temporal region, but at the time of admission was felt all over the head during an attack. No abnormality had been noticed in twelve examinations of the urine, with the exception of a trace of albumin on September 11, 1923.

Examination on admission had revealed the pulse rate to be 80. There had been no ataxia. The intellect had been clear and the memory excellent. Papillœdema had been present. The eyesight had been good and the pupils had reacted to light and accommodation. Slight rapid vertical nystagmus and lateral nystagmus to the right had been present. Hearing in the right ear had been better than in the left. Slight paresis of the right quadriceps muscle had been present and coordination had been definitely disturbed in the right leg. Sensation in regard to touch, pain and temperature had been normal. In regard to position and passive movement sensation had been defective in the right leg and right thigh. The knee jerks had been exaggerated especially on the right side. Slight patellar and ankle clonus had been present on the right side. The response to the plantar reflex had been flexor in type. The Wassermann test had been carried out by the ice box method on three occasions. No reaction had been obtained in the blood on July 20 and August 2, 1923, or in the cerebro-spinal fluid on September 12, 1923. Lumbar puncture had revealed a great increase of intra-cranial pressure. Radiological examination of the cranium had revealed no abnormality of the skull or sinuses and no abnormality had been discovered in the stomach or duodenum. Dr. North had found bilateral papillœdema on July 26, 1923. The papillœdema had subsided slightly (to about two diopters) on August 20, 1923, and the exudate was commencing to organize. On September 21, 1923, extreme papillœdema had been present in both eyes. Some large fresh hæmorrhages had occurred and the loss of vision in the right eye was organic. On July 21, 1923, the patient had still complained of diplopia. From this date until the time of the operation the patient had suffered from headache, failing sight and vomiting. The headaches had been temporarily relieved by lumbar puncture. Red cells and globulin had been present in the cerebro-spinal fluid. The temperature had been 37.8° 100° F.) on admission and 37.6° C. (99.6° F.) on the day following operation; otherwise there had been no pyrexia.

Anti-syphilitic treatment had been carried out by the administration of potassium iodide and mercury given intra-muscularly. Only four injections of mercury had been given, as the patient did not feel well after them. The dose of potassium iodide had been increased until on August 6, 1923, he had been taking four grammes (sixty grains) three times a day and this dose had been continued for at least ten weeks.

Dr. Bell said that he had carried out a right sub-temporal decompression operation on September 26, 1923, under ether anæsthesia. The respiration rate had at times become very slow. An oblique incision had been made above and behind the ear. The fibres of the temporal muscles had been separated and retracted. The bone had been removed with Doyen's burr and Horsley's bone forceps. A piece of bone about 7.5 centimetres square had been removed together with *dura mater* and minute black pigment spots had been revealed around the vessels in the brain and the pia-arachnoid. Decompression on the left side had been deferred as the patient's breathing was causing the anæsthetist considerable anxiety. On October 4, 1923, the wound had healed except at the lower end of the incision and from this some cerebro-spinal fluid had drained. On October 5, 1923, lumbar puncture had been carried out. Forty-two cubic centimetres of light straw-coloured cerebro-spinal fluid had been withdrawn. The sub-temporal swelling had subsided after the withdrawal of this fluid. Pressure over the decompressed area had accelerated the flow of the cerebro-spinal fluid. On October 7, 1923, thirty-five cubic centimetres of fluid had been obtained by lumbar puncture and on October 12, 1923, no drainage had occurred from the wound. As a result of the operation no headache had occurred after the day following the operation. The patient had not vomited. Dr. North had reported on October 2, 1923, that papillœdema was still present. No perception of light had been present in the right eye and the patient had been able to count fingers at three metres distance with the left eye. The papillœdema had decreased somewhat in the right eye, but only slightly in the left.

Sub-temporal decompression had been performed on the left side of the skull on October 24, 1923. An oblique incision had been made above and behind the ear. The same small black pigment spots in the brain had been seen as at the previous operation. The patient had complained of slight headache on October 25, 1923. He had not complained of headache and vomiting while he remained in hospital, but his vision had not improved. He had been discharged on December 17, 1923. When seen on July 7, 1924, the patient had stated that he had no return of vomiting or headaches, that the vision in the left eye was better and that he was blind in his right eye. He could read a newspaper with difficulty in bright sunlight and had read one hundred and fifty pages of a novel in a day. In March, 1924, he had had a fit and was "not sensible" for two hours. He did not suffer from giddy turns, but was still unsteady on his feet. His memory was good. The patient was very emphatic that the severe headache had been completely relieved by operation. There was still considerable exaggeration of the reflexes of the right lower limb. The left pupil reacted slowly to light and the right pupil was fixed. Dr. North had reported on the day of demonstration that secondary optic atrophy was present in both eyes. The edges of the discs were blurred by organized exudate. Spots in the fundi marked the position of organized blood at the sites of hæmorrhage. Dr. North thought that very little further improvement in vision could be expected.

Dr. Bell pointed out that the phenomena presented by by this patient seemed explicable only on the basis of new growth, the exact site of which could not be determined. The absence of any history of syphilis and the repeated failure to obtain a reaction on examining the blood and cerebro-spinal fluid by the most delicate refinements of the Wassermann test appeared to exclude a syphilitic granuloma, nevertheless active treatment had been given without result. As it had been impossible to localize the tumour, he had determined to perform bilateral temporal decompression in order to save what remained of the patient's eyesight and to relieve the persistent headache. The result of the operation seemed most gratifying. Undoubtedly the patient would have been in much worse condition, if alive at all, had the operation not been performed. Cushing had pointed out that in his experience a patient had lived for eight years after a double decompression and Dr. Bell thought that even if life were not prolonged to such an extent, the relief from suffering more than justified surgical intervention in the majority of instances.

Plexiform Neuroma of the Arm.

Dr. Bell also showed a pplexiform neuroma which he had removed from the arm of a patient. The notes of this case will be published in full in a subsequent issue.

Lupus of the Pharynx.

DR. HEDLEY TERREY showed a female patient who was suffering from lupus of the posterior wall of the pharynx.

Skiagrams.

DRS. J. G. AND W. A. EDWARDS showed a series of interesting skiagrams. Among these were the following: A thermometer in the bladder of a female patient which had been removed without breakage by Dr. Archie Aspinall; the base of the fifth metatarsal bone in both feet ossifying as a separate bone; hydrocephalus with "bursting" of the fronto-parietal suture as a result of intra-cranial pressure; new growth of the lung; hydatid of the lung; hydro-pneumothorax; mediastinal tumour originating in the thymus; malignant disease of the descending colon with deposits in the lung; Perthes's disease pointing in the groin with the outlines of pus collection clearly visible; pneumonoconiosis and tuberculosis of the lung; cystic bone disease with spontaneous fracture; *osteitis fibrosa* of the pelvis and femur with spontaneous fracture of the latter.

Hæmolytic Anæmia.

DR. A. W. HOLMES À COURT showed a male patient, aged thirty-one years, a cabinet maker, who had been admitted to hospital on April 8, 1924. Inquiry into the family history had revealed that the patient's mother had died of cardiac failure. The patient had complained of a feeling of weakness of about four months' duration. He had often become giddy and short of breath after an exertion. No swelling of the ankles had occurred. Sometimes the patient had experienced a dull ache in the back about four hours after meals and this had been relieved by the action of the bowels. He had been somewhat constipated. He had not lost any weight and had not suffered from palpitation. He had denied venereal infection, had given no history of consumption of alcohol and was a non-smoker. He had had no previous illnesses. On admission the patient had been very pale and thin and the mucous membranes had been anæmic. Nothing of importance had been discovered in the alimentary, respiratory, genito-urinary or nervous systems. Examination of the cardio-vascular system had revealed considerable pulsation in the vessels of the neck and in the subclavian and brachial arteries. The apex beat had been situated in the fifth intercostal space just within the nipple line. Palpation had confirmed inspection. On auscultation the sounds at the mitral area had been found to vary. A loud first sound had been accompanied by a systolic murmur and this had alternated with a clear first sound. At the aortic area a soft systolic murmur had replaced the first sound and the second sound was clear. The pulse rate had been 90 in the minute, the rhythm had been regular, the tension had been low, the pulse had been of average volume and the vessel wall normal. X-ray examination had demonstrated the presence of a præ-pyloric ulcer and colonic stasis. Examination of the blood revealed the erythrocytes to number 1,764,000 per cubic millimetre, the hæmoglobin value had been 60%, the colour index had been one, poikilocytosis and anisocytosis had been present and nucleated red cells had been seen. A test meal had been given on April 14, 1924, free hydrochloric acid had been absent. A duodenal culture had been made, streptococci isolated and a vaccine prepared. The patient had been given increasing doses of *liquor arsenicalis* and dilute hyrochloric acid with every meal. He had also been given increasing doses of an autogenous vaccine made from the duodenal culture. The patient's colour had vastly improved, his general health and strength had been built up and he had left hospital a healthy man, able to perform his usual work. The improvement in the blood picture was demonstrated by Dr. Holmes à Court by the accompanying table.

Date.	Red Cells.	Hæmoglobin Value	Colour Index.
April 10, 1924	2,000,000 ..	50% ..	1.25
April 22, 1924	2,750,000 ..	60% ..	1.09
May 1, 1924	3,000,000 ..	60% ..	1.0
May 12, 1924..	3,500,000 ..	65% ..	0.93
June 10, 1924	3,900,000 ..	80% ..	1.02
July 1, 1924	4,750,000 ..	80% ..	0.84

Dr. Holmes à Court considered that in the majority of the cases of hæmolytic anæmia the condition present was usually one of achlorhydria together with the presence of a hæmolysing organism in the duodenum.

Ataxic Paraplegia.

Dr. Holmes à Court also showed a male patient, aged thirty-four years, a labourer, who had been admitted to hospital on June 25, 1924. Inquiry into the family history had not revealed the presence of any similar neuropathic condition, except in regard to a cousin who was alleged to be insane. Sixteen years prior to admission the patient had noticed that he could not walk straight, this was more noticeable when walking in the dark. He had gradually become worse until six months previously when he could not walk without support. At the same time his speech had become slower and indistinct. The patient had stated that at the beginning of his illness the sinews of his feet had become drawn up. At the time of admission he had had trouble with micturition, he had not been able to stop the flow of urine when once it had started. His eyesight had also recently become worse. He had had gonnorhœa twelve years previously, but had denied syphilitic infection. He was a non-smoker, but had consumed a moderate quantity of alcohol. Examination on admission had not revealed anything abnormal in the alimentary, respiratory, cardio-vascular or genito-urinary systems. On examination of the nervous system it had been found that the knee jerks were exaggerated, that the *tendo Achillis* jerks were sluggish and the plantar reflexes extensor in type. The abdominal reflexes had not been obtained on the left side and were sluggish on the right. The sensation to touch had been slightly impaired in the leg. Sensation of pain had been slightly dulled. Sensation to heat and cold, passive position and movement had been normal. Incoordination and Romberg's sign had been present. The eyesight had been fairly good. The ophthalmologist had reported: "Fundi normal, unusually well marked physiological cups in both discs." Lateral nystagmus had been present. The pupils had been equal and had reacted to both light and accommodation. Adduction of the lower limbs had been present together with wasting of the muscles from disuse. There had not been much loss of power in either arms or legs. *Pes cavus* had been present in both feet. The gait was high stepping and wildly ataxic. No reaction had occured to the Wassermann test when applied to the blood and the cerebro-spinal fluid. No reaction had been obtained by the globulin test in the cerebro-spinal fluid and the cytology of this medium had been normal.

Dr Holmes á Court pointed out that the condition was of particular interest from the point of view of diagnosis. It appeared to conform in certain particulars to the hereditary cerebellar ataxia of Marie rather than to the ataxia of Friedreich which was at first suggested by the general appearance and the presence of *pes cavus*. *Tabes dorsalis* could be readily excluded by the neurological findings and the absence of syphilitic infection. Huntington's chorea was differentiated by the presence of nystagmus, the character of the speech defects, the absence of involuntary movements and the condition of the tendon reflexes and so forth. Diffuse or disseminated sclerosis offered greater difficulties. It was to be observed that the term hereditary cerebellar ataxia had originally been applied by Marie to a syndrome characterized by ataxic gait and cerebellar incoordination. This disease differed from the condition described by Friedreich in that the onset was usually later in life and there was retention of the tendon reflexes without the trophic disturbances, *pes cavus* and lordosis which were features of Friedreich's disease. Marie had considered that the syndrome bearing his name and Friedreich's disease were probably different types of one and the same affection due to hereditary degeneracy of the nervous system. Many cases had since been recorded in which the conditions were clinically intermediate between the two types, so that no hard and fast dividing line could be drawn. Dr. Holmes à Court thought that his patient's condition occupied such an intermediate position. Although the hereditary incidence could not be definitely established in the case of his patient, there was evidence of neuropathic taint in the family history. More-

over, instances of Marie's ataxia had been recorded in which a single member only of one generation had been affected in families the subject of the disease in remote generation and collaterals. In the patient demonstrated it might be observed that the ataxia of the limbs, disturbance of speech and nystagmus were of the nature of motor incoordination. Conduction of common sensation was involved little if at all, pyramidal and cerebellar tracts being the structures grossly affected. The exclusion of disseminated sclerosis was difficult, the disturbance of voluntary movement, nystagmus, speech defect, increased tendon reflexes and extensor plantar response being common to both diseases. In cerebellar ataxia club foot and scoliosis were only exceptionally seen and were not found in disseminated sclerosis. The gait, moreover, was usually distinctive, being spastic in sclerosis with the paces regular but short, the toes appearing to cling to the floor and catching on minor obstacles, unlike the wildly ataxic movements of cerebellar disease. The steady progression of the disease as in hereditary ataxia was quite different from the intervals of remission followed by exacerbation seen in disseminated sclerosis. On the whole the clinical evidence in the case of the patient under consideration appeared to point to Marie's hereditary cerebellar ataxia as the most appropriate diagnosis.

Sclerodactyly.

DR. G. C. WILLCOCKS, M.C., O.B.E., showed a male patient, aged thirty-five years, who had been a miner, a drover and a greengrocer's assistant. The patient had sought treatment on account of stiffness, blueness and coldness of the hands of two years' duration. He also complained of general stiffness of the body, especially in the winter. The patient had suffered from malaria in 1918 and pleurisy in 1923. There was nothing of importance in the social history. Inquiry into the history of the condition of the hands revealed the fact that the disability had been gradually getting worse during the previous two years. The patient had been treated as an out-patient with hot air and medicine. No improvement had resulted. He was subject to colds, but otherwise felt well. Dr. Willcocks had pointed out that the patient was thin and had a good colour. The teeth were fairly good and not obviously infected. The throat was normal and the tongue furred. The pupils reacted to light and accommodation and the knee jerks were present and equal. There was no evidence of disease of the nervous system. Nothing abnormal could be discovered on examination of the heart. The chest was found to be normal on clinical examination, but X-ray examination had revealed the presence of definite enlargement of the bronchial glands. The temperature was normal, the pulse rate was 76 in the minute and the respirations numbered 18. No abnormality could be detected on examination of the abdomen, the joints or the urine. The serum had not reacted to the Wassermann test. Both hands were very blue, especially the fingers and thumbs. The patient said that this was more noticeable in the morning after rising, but wore off during the day as the hands grew warmer. The hands felt cold to the touch and the thumbs felt like wax candles. It was difficult to pinch up the skin of the thumbs and fingers. Dr. Willcocks said that the patient had obvious difficulty in closing and opening the hands when they were cold, but less so when they were warm. The tendons in the left palm were prominent as though from early Dupuytren' contracture. The elbow joints could not be completely extended owing to apparent contractures on the anterior aspects of the joints. Thickening and hardness of the subcutaneous tissues were noticeable on the fingers, but not definitely so elsewhere. There were no definite bands as in generalized scleroderma. There was some difficulty in picking up the skin of the forearm. The leucocytes numbered 11,500 per cubic millimetre. The blood cells were otherwise normal. A reaction had been obtained by the complement deviation test for the gonococcus. The sputum had been examined on three occasions, but no tubercle bacilli had been discovered. No bony changes had been discovered on radiological examination of the hands.

Dr. Willcocks thought that the most likely diagnosis of the condition was sclerodactyly. The condition had been regarded as arthritis some time previously, but at the time of demonstration there was no evidence of joint affection. Marie's disease (chronic hypertrophic osteoathropathy) had been suggested, but the appearance was not at all typical of that condition and evidence of disease of the lungs was scanty. Sequeira mentioned the frequent onset of sclerodactyly with symptoms like those of Raynaud's disease. In the latter condition, however, the thickening and hardening of the subcutaneous tissues were absent.

Acromegaly.

DR. H. C. ADAMS showed a patient who was suffering from acromegaly and read the clinical history.

Achondroplasia.

Dr. Adams also showed a patient who was suffering from achondroplasia

Radium Treatment.

DR. L. P. JOHNSTON showed a series of photographs illustrating the results of radium treatment in various malignant conditions of the skin. These will be published in a subsequent issue.

Adenoma Sebaceum.

DR. NORMAN PAUL showed a patient who was suffering from *adenoma sebaceum*. Numerous small pin-head sized tumours of a brownish or reddish colour were present on the nose, cheeks and chin. There were also seen grouped lesions on the side of the nose which were larger and more pedunculated. The patient stated that the lesions had first appeared when he was eleven years of age and that they had progressively increased in number. The mental condition of the patient was good.

Epidermolysis Bullosa.

Dr. Paul also showed a patient who was suffering from *epidermolysis bullosa*. The lesions had appeared for the first time in adult life and had been present for twelve years. Only the dorsum of the fingers, the hands and the wrist were affected. The slightest trauma or sometimes a handshake would produce bullæ. There were a number of milium-like bodies present marking the sites of previous lesions.

Rodent Ulcer of the Face.

Dr. Paul's third patient had previously suffered from a rodent ulcer involving practically the whole of the left side of the face. The left ear had entirely disappeared and in this region there had been deep ulceration affecting the bones of the skull. The left eye had been destroyed by the growth which had extended to the nose and had been rapidly spreading towards the other eye. Radium had been applied with great success and at the time of demonstration the deep ulceration was limited to the region of the left auricle. To this it was proposed to apply X-rays.

Obituary.

DAVID RICHARD EDWARDS.

ON August 19, 1924, there died an old and greatly respected member of the medical profession, Dr. David Richard Edwards. He was born in Llangollen in Wales, in 1846, and received his medical education in Edinburgh, where he was a pupil of Syme and Simpson. His recollections of these two great men and others of their period were vivid and interesting.

After some small experience of general practice and a considerable experience of lunacy work in England, David Richard Edwards arrived in New South Wales over forty-six years ago. We believe he practised for a short time in Parramatta, but he soon joined the medical staff of the Australian Mutual Provident Society and up to the time of his death he devoted himself to the work of a medical examiner for life assurance. He was keenly interested in that branch of work and although he made a number of trips to Europe and elsewhere, for he was an indefatigable traveller, he always resumed his insurance work as soon as he returned to Australia.

He accumulated an enormous experience of this special practice. It must be rare for any one man to have examined as many proponents as were seen by him. His shrewdness, common sense and really great wisdom in the interpretation of physical signs made him an ideal prognostician. The wonderful accuracy of his judgement has been shown by the after histories of the persons with whom he dealt, and the Australian Mutual Provident Society was certainly a great gainer by the labours of this member of our profession.

David Richard Edwards was a keen Welshman, a good scholar in the Welsh language and a delightful old-world type of practitioner. He has passed to his rest with his life's work well done and though he had neither wife nor child to mourn his death, he has left many friends who liked and respected him in life and who feel that their small world is the poorer through the loss of this kindly courteous doctor with the manners and ways of a less hurried age.

R. SCOT SKIRVING.

Correspondence.

CHRONIC URETHRITIS.

SIR: In reply to Dr. Macqueen's letter in THE MEDICAL JOURNAL OF AUSTRALIA, August 23, 1924, I would like to make a few remarks. Dr. Macqueen did not apparently quite grasp my contentions. In my paper I expressed the opinion that chronic urethritis continued to exist and develope after gonococci had, not only apparently, but actually disappeared from the genito-urinary tract. Also that such chronic urethritis was marked by the presence of anatomical lesions and indicated internally by a discharge and filaments both of which may contain pus; and that the lesions and pus in these cases may be produced and kept up by non-gonococcal organisms often anaerobic and when anaerobic invisible by the ordinary methods of investigation. The gonococcus has not a monopoly for the production of pus in the urethra; quite an abundant purulent urethral discharge may be present in non-gonococcal urethritis and pus can and does accompany chronic urethritis in the absence of gonococci and persists until the chronic urethritis is cured. I did not and do not say that a man having a purulent urethral discharge may safely marry provided the microscope fails to reveal gonococci; far from it. A man should not marry if he has a purulent urethral discharge even if his genito-urinary tract not only appears to be free, but is free from gonococci. The gonococcus is not the only urethral organism that can cause trouble to the newly wed. It is by no means certain that other pus-producing urethral organisms including the anaerobes are innocuous given conditions favouring exaltation of virulence. That exaltation of virulence may occur under suitable conditions is a fact established clinically and in the laboratory. I did not introduce the question of chronic urethritis and marriage into my paper, not because it is unimportant, but to avoid unduly lengthening the paper and I thank Dr. Macqueen for giving me the opportunity to mention it here.

Yours, etc.,
L. E. ELLIS,
Honorary Medical Officer for Venereal Diseases, Royal Prince Alfred Hospital, Sydney.

September 1, 1924.

Medical Appointments.

DR. BEDLINGTON HOWEL MORRIS (B.M.A.) has been reappointed Inspector-General of Hospitals, South Australia, under the *Mental Defectives Act* 1913.

Medical Appointments Vacant, etc.

FOR announcements of medical appointments vacant, assistants. *locum tenentes* sought, etc., see "Advertiser," page xvi..

THE UNIVERSITY OF MELBOURNE: Chair of Pathology.

Medical Appointments: Important Notice.

MEDICAL practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429, Strand, London, W.C..

BRANCH.	APPOINTMENTS.
NEW SOUTH WALES: Honorary Secretary, 30 - 34, Elizabeth Street, Sydney.	Australian Natives' Association. Ashfield and District Friendly Societies' Dispensary. Balmain United Friendly Societies' Dispensary. Friendly Society Lodges at Casino. Leichhardt and Petersham Dispensary. Manchester Unity Oddfellows' Medical Institute, Elizabeth Street, Sydney. Marrickville United Friendly Societies' Dispensary. North Sydney United Friendly Societies. People's Prudential Benefit Society. Phœnix Mutual Provident Society.
VICTORIA: Honorary Secretary, Medical Society Hall, East Melbourne.	All Institutes or Medical Dispensaries. Australian Prudential Association Proprietary, Limited Mutual National Provident Club. National Provident Association.
QUEENSLAND: Honorary Secretary, B. M. A. Building, Adelaide Street, Brisbare.	Brisbane United Friendly Society Institute. Stannary Hills Hospital.
SOUTH AUSTRALIA: Honorary Secretary, 12, North Terrace, Adelaide.	Contract Practice Appointments at Renmark. Contract Practice Appointments in South Australia.
WESTERN AUSTRALIA: Honorary Secretary, Saint George's Terrace, Perth.	All Contract Practice Appointments in Western Australia.
NEW ZEALAND (WELLINGTON DIVISION): Honorary Secretary, Wellington.	Friendly Society Lodges, Wellington, New Zealand.

Diary for the Month.

SEP. 9.—New South Wales Branch, B.M.A.: Ethics Committee.
SEP. 10.—Tasmanian Branch, B.M.A.: Branch.
SEP. 10.—Central Northern Medical Association, New South Wales.
SEP. 10.—Melbourne Pædiatric Society.
SEP. 11.—New South Wales Branch, B.M.A.: Clinical Meeting.
SEP. 11.—Victorian Branch, B.M.A.: Council.
SEP. 11.—South Australian Branch, B.M.A.: Council.
SEP. 11.—Brisbane Hospital for Sick Children: Clinical Meeting.
SEP. 12.—Queensland Branch, B.M.A.: Council.
SEP. 12.—Central Southern Medical Association (Goulburn), New South Wales.
SEP. 16.—New South Wales Branch, B.M.A.: Executive and Finance Committee.
SEP. 17.—Western Australian Branch, B.M.A.: Branch.
SEP. 17.—South Sydney Medical Association, New South Wales.
SEP. 19.—South Eastern Medical Association (Wollongong), New South Wales.
SEP. 20.—Northern Districts Medical Association, New South Wales.
SEP. 20.—Northern Suburbs Medical Association, New South Wales.

Editorial Notices.

MANUSCRIPTS forwarded to the office of this journal cannot under any circumstances be returned. Original articles forwarded for publication are understood to be offered to THE MEDICAL JOURNAL OF AUSTRALIA alone, unless the contrary be stated.

All communications should be addressed to "The Editor," THE MEDICAL JOURNAL OF AUSTRALIA, B.M.A. Building, 30-34, Elizabeth Street, Sydney. (Telephone: B. 4635.)

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